

COURSE OF STUDY IN TYPEWRITING

for

SENIOR HIGH SCHOOLS



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FOREWORD



THIS course of study in Typewriting was prepared under the direction of the following committee on Commercial Education:

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It is part of a general program of curriculum development organized under the direction of William H. Bristow, Director of the Education Bureau, Department of Public Instruction.

The teachers of typewriting of the Commonwealth have had a large share in preparing the course, since the committee made use of the results of a study participated in by most of the schools of the State. The results of the study are reported throughout the course.

In preparing this course of study the committee has paid particular attention to problems of instruction which are peculiar to the secondary school. Because of the complexity of the problem, it has been necessary to deal primarily with those considerations which apply particularly to instruction in typewriting in the secondary school.

Some of the outstanding problems in this connection are: Great masses of youthful pupils who need guidance; class instruction; fitting typewriting into the program of studies in crowded high schools in which there may be conflicting interests, traditions and misunderstandings; fitting typewriting into the various commercial curricula; the training and certification of teachers; efficient, economical equipment, textbooks, and supplies: method, content, lesson planning, error analysis, and the correction of faulty habits. The committee has endeavored to be particularly helpful to teachers, supervisors, principals, and superintendents.

The teachers of the State may have a part in the continued revision of all courses of study if they will send results of their studies and researches, and their constructive criticism to the Education Bureau, Department of Public Instruction. Only through the constant pooling of experience can we hope to improve instructional procedures and plans.

The committee acknowledges the help of the superintendents, principals and teachers who so promptly and completely answered the questionnaire, and also the assistance of Mr. George E. Mumford, Special Assistant in the Division of Commercial Education, Philadelphia, who has helped in the collection and organization of this material.

JAMES N. RULE,
Superintendent of Public Instruction

October 1, 1933

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Course of Study in Typewriting

PLACE OF TYPEWRITING IN SCHOOL PROGRAM

HALF of the recording and most of the letter writing in business offices today is prepared on the typewriter.¹ Many publishing houses will not consider a manuscript which is not typewritten. In colleges and professional schools, typewritten manuscripts always receive higher consideration. For these reasons many pupils, irrespective of the course they are taking, would benefit from instruction in typewriting. In fact, with the introduction of the portable

typewriter it is now almost as important for a person to be able to typewrite accurately and efficiently as it is to write by hand. The obvious advantages of work done on the typewriter are: It can be accomplished with less effort; in a shorter time, and the product is more legible. High schools would be rendering a valuable service to their pupils if they offered as an elective a year of typewriting to all pupils. Typewriting now enrolls more pupils than any other business subject of the eleventh and twelfth years.

PRINCIPLES OF CURRICULUM PLACEMENT²

Educational theories which determine the place in the curriculum for the study of typewriting are:

1. The objectives of education comprehend all the abilities, attitudes, habits, appreciations and forms of knowledge that a man may need.
2. The curriculum must be adapted to varying social needs:
 - a. Social needs vary historically — material adapted only to needs that no longer exist must be rejected and material adapted to new needs must be introduced.
 - b. Social needs vary between different communities—the curricula for different high schools will vary.
 - c. Social needs vary between different groups, within the same community, so the content of subjects must vary with groups.
3. In selecting materials it is not enough to show that they have *some* value—they must be of sufficient social value to justify the time; they must be *more* valuable than other possible materials.
4. Education must take a pace set, not by itself, but by social progress.
5. The curriculum must harness the play-motive.
6. It is relatively easy to construct a curriculum based on present needs. It requires vision to supplement such a curriculum in such a manner as to provide for social progress.
7. One of the fundamental purposes of the public schools is to train for character and better citizenship. All courses, therefore, must be organized and conducted to contribute to this purpose.
8. A good citizen must be able to earn a satisfactory living for himself and for those dependent upon him. The high school should, therefore, include pre-employment training for those pupils who will go to work immediately upon leaving the high school.
9. The skills, knowledges, and appreciations needed for satisfactory employment in an occupation can be determined only by a study of the duties and responsibilities required of those employed in that occupation.
10. Since the purpose of the high school pre-employment courses is to prepare for initial employment on the highest level possible for a novice in the occupation, these courses must be so organized and conducted as to give the skills, knowledges, and appreciations needed for satisfactory service at the entrance level into the occupations usually found by high school pupils.
11. If consistent with its primary purpose, a pre-employment course may also give the knowledges and appreciations which will enable the beginner to gain an early promotion.
12. No pre-employment training should be given in the high schools for occupational levels which the pupil cannot reach for several years after entering the occupation, nor should training be given for occupations not generally open to high school-trained beginners in the business community in which the pupil expects to find initial employment.
13. So far as may be economically feasible in the community, the evening and continuation schools will teach the skills, knowledges, and appreciations needed by those in the higher levels of an occupation; hence the high school pre-employment courses should be organized to give an effective introductory training for an occupation rather than to serve as the sole source of education for that occupation.
14. An effective pre-employment course in typewriting requires:
 - a. A specially-trained teacher who has successfully followed the occupation for which the

¹ See Handwriting Survey to Determine Grade Standards, by John G. Kirk, Journal of Educational Research, March and April, 1926, Table III, page 268.

² The committee is indebted to Mr. E. W. Barnhart, Chief, Commercial Education Service, Federal Board for Vocational Education, Washington, D. C., for the source material of this statement of principles.

COURSE OF STUDY IN TYPEWRITING

course prepares and who, in addition, has been trained to teach typewriting;

- b. Teaching materials selected and organized into a course of study solely on the basis of their value in giving training for the occupation of typist;
- c. Instruction methods which require the pupil to perform under usual working conditions all the operations required of those on the level on which the pupil may enter an office;
- d. Needed skills must be developed by methods which do not confuse imparting knowledge with

the development of skill nor long-drawn-out explanations with teaching.

15. Whenever a pre-employment course is established, there must be means provided for determining the efficiency of the training. In most high schools this can be done best by a follow-up of all who have received instruction in a pre-employment course whether or not they complete it.
16. A high school offering several pre-occupational courses, from which the pupils may select, must help the pupils to choose their occupation wisely by providing vocational guidance and information.

OBJECTIVES

In this course of study the term "aim" is used in connection with a lesson plan. It is the statement of the teacher's purpose or purposes in a given lesson. Objectives relate to the purpose or purposes of a course as a whole. In typewriting they are:

1. To learn the operating techniques and other manipulative skills necessary to typewrite on an

automatic, touch basis and at a rate which will satisfy at least minimum vocational requirements.

2. To develop in the pupil who studies typewriting on a vocational basis the knowledges, skills, habits, and traits which are incidental to his success in an office.
3. To develop a sense of neatness, style, and accuracy.

OUTCOMES

Outcomes are realized objectives. These are stated from the pupil's point of view.

1. My letters must be good enough to be mailable.
2. To be mailable, they must be accurate as to facts, correctly punctuated, couched in approved English, and must be tastefully centered and arranged.
3. I will not write nonsense. Whenever I am in doubt, I will take the trouble to consult my employer or the dictionary.
4. My speed in typewriting must be what my employer demands of a beginner. I must improve at least as fast as my employer expects me to and ultimately I must reach the highest rate of which I am capable.
5. I will not talk about matters connected with the office to those who have no right to know about them.
6. I will give attention only to those things in which I have a right to be interested.

7. My employer's interests must come first as long as I am in his employ.
8. I will be prompt and I am willing to give extra time and work whenever my employer finds it to be necessary.
9. I will be satisfied with nothing but the most accurate work of which I am capable.
10. I will keep my body and mind clean and my person sacred.
11. I will keep my desk and papers tidy and my machine in clean, efficient condition.
12. I will not take what does not belong to me without permission.
13. Neither pleasure, nor comfort, nor convenience shall prevent me from faithfully fulfilling my obligations.
14. I will not try to just get by.
15. I will do the right thing even though my work is not inspected or appraised.

ASSUMPTIONS

1. Drills for use in learning to typewrite should consist as much as possible of writing words, sentences, letters, and business forms. Nonsensical combinations of letters of the alphabet have value only in fixing association of key with finger and the nature of the stroke.
2. All teachers should teach correctly from the beginning the nature of the stroke.
3. Drills for use in typewriting should aim to make the spelling and writing of the commonest words absolutely automatic.
4. Drills in typewriting should aim to make the common problems of punctuation immediately solvable.
5. Correct posture is most important to success in learning to typewrite and will not be neglected.

OBJECTIVES, OUTCOMES, ASSUMPTIONS AND PROGNOSIS

6. The use of an eraser will not be tolerated until the pupil is in the last semester of instruction in typewriting and then he will be taught how to use it.
7. The work of the first two semesters in learning to typewrite cannot be taught efficiently except by the drill method. According to this method the teacher has no time to sit and mark papers or teach another group some other subject.
8. Lesson planning and teacher-conducted class work are essential.
9. Assignments of laboratory exercises (herein called individual work) must be made daily. There should be a minimum assignment to be typed by all pupils and supplementary assignments for faster pupils. Long assignments which require several days to finish are an unsatisfactory procedure in class instruction and will not be tolerated by progressive teachers.
10. In grading papers, the scores should be based either on the number of rights or the number of wrongs, and the paper should then be graded by one of the approved methods of interpreting scores.
11. Every pupil should be responsible for his best work at all times.
12. Pupils will be taught, step by step, the art of transcribing. It has been suggested that the rate of transcription should be not less than one-half and if possible two-thirds of the copying rate.

PROGNOSIS

1. Prognosis in typewriting deals with the elimination of pupils who will not profit from a study of typewriting in a class group.
2. The blind are among our best operators.
3. Low general intelligence does not interfere with the ability to acquire a usable skill in typewriting.
4. A person who does not have the use of all the fingers on both hands could not learn to operate a typewriter to advantage in a class group.
5. A person who does not have some degree of manual coordination cannot learn to operate a typewriter on a vocational basis.

Fifty-six per cent of the group with low I. Q.'s received a grade of below M (this grade would correspond to AVERAGE). At the other end the percentage increases with the rise of the I. Q. Dr. Book, of the University of Indiana, felt the same way about this and actually measured the voluntary muscular control of the world's champion typists along with other groups. His conclusions are:

1. "That all members of the professional group in the last world's contest rank in voluntary motor ability far above the norms for their respective age groups and above the contestants in the amateur and other contest classes.
2. "That the world champion typists, George Hossfield and Albert Tangora, made the highest records on the motor ability tests, the records being far superior to the records of all other contestants.
3. "That the contestants in the professional group arrange themselves in a regular descending order on the motor ability tests.
4. "That the average deviation for those taking part in the world's typewriting contest in a given group is lower than for the groups which compose the corresponding age norms."

Carl L. Altmaier, of Drexel Institute in Philadelphia, is the author of a prognostic test for typewriting. It follows the principle of the maze and is as follows: Write the numbers 1 to 50 on a sheet of paper $8\frac{1}{2} \times 11$. The numbers should be about one-half inch in size and scattered irregularly over the sheet. Each pupil is supplied with ten identical sheets. The pupil works exactly thirty seconds on each sheet circling each number in turn and drawing a line from one number to the next. The graph showing the increase in ability to locate and encircle numbers should show a constant increase in ability with a diminishing rate of increase from trial to trial.

Conclusion: Since relatively few persons are lacking in some degree of manual coordination and defects of the hands are obvious to the teacher, prognostic tests in typewriting are relatively unimportant.

PROGRAM PLACEMENT

Typewriting in the Senior High School

The present practice of schools in Pennsylvania in the matter of the program placement of instruction in typewriting is shown in the results of a state-wide questionnaire. From a tabulation of the results we learn that 76.5% of the schools devote five periods a week to typewriting; that 17.0% have forty minute periods, 38.3% have forty-five minute periods and 20.5% have fifty minute periods (75.8% in all); that the average length of period is forty-eight minutes and the median length is 44.2 minutes; that 56.4% of our schools teach typewriting throughout four semesters, beginning in 11A and that 10% teach it in four semesters beginning in 10B. In other words, over two-thirds of our senior high schools offer four semesters of typewriting in the last two or two and a half years of the senior high school. Only 4.2% of

the schools begin typewriting in the eighth year and 7.8% begin it in the ninth year.

Returns from the eighteen largest cities in the United States indicate that these cities are in accord with this policy. These returns show that the median length of the typewriting period is 45.4 minutes; that the average number of such periods daily is one; that the median number of semesters in which typewriting is offered is 4.6; that two-thirds of the cities begin typewriting instruction in either the 10B or 11A semester.

It is also gratifying to learn that this policy of our schools is in accord with Principles 10, 11 and 12 in the section entitled "Principles of Curriculum Placement," and with recent studies of employment conditions. Among the studies available are a survey of duties performed by continuation school pupils made under the direction of the Division of Commer-

cial Education in Philadelphia and reported in the Second Yearbook of the Eastern Commercial Teachers Association, p. 258. It is also confirmed by the report on occupations in Pennsylvania, made by the Census Bureau and based on data collected in the 1930 census. From these figures we learn that only 4.8% of the 64,088 stenographers and typists who were in employment in Pennsylvania in 1930 were under eighteen years of age. Of these 4.8%, 98.2% were either in their sixteenth or seventeenth year and undoubtedly were the precocious graduates of our high schools. In other words, there is only the most limited opportunity, if any, for the immature stenographer and typist.

Of the total number of stenographers and typists in Pennsylvania in 1930, 56.8% were between eighteen and twenty-four years of age and 27.8% were between twenty-five and thirty-four. This high percentage of stenographers and typists who were over twenty-four indicates a striking change in the last decade. The Senior Commercial Occupations Survey issued by the Federal Board for Vocational Education, Miscellaneous 405, April, 1922, gave figures which indicated that over ninety per cent of the stenographers in certain large cities of the United States were between twenty and twenty-four years of age. Undoubtedly this change is due to the fact that 94.2% of the stenographers and typists who were employed in Pennsylvania in 1930 were women and that 10.5% of these women were married.

In view of the foregoing facts, we recommend that instruction in typewriting be confined to four semesters and offered as near to graduation from senior high school as possible. The adoption of one of the two following plans is suggested:

Plan A—Begin Typewriting I in the 10B semester.
Typewriting II in the 11A semester.
Typewriting III, largely transcription, in the 11B semester.

Typewriting IV, largely transcription, in the 12A semester.

Shorthand placement parallels this plan.

Plan B—Begin Typewriting I in the 11A semester.
Typewriting II in the 11B semester.
Typewriting III, largely transcription, in the 12A semester.
Typewriting IV, largely transcription, in the 12B semester.

In rostering typewriting, most efficient teaching will be possible if the Typewriting III period immediately follows the Shorthand III period and the Typewriting IV period immediately follows the Shorthand IV period. The shorthand and typewriting periods, so far as advanced classes are concerned, may well be taught by the same teacher. Reasons for this suggestion are given in the section on "Transcription."

Disadvantages of Offering Typewriting in the Junior High School

1. Does Not Concern Present Values. Cox¹ states, "Junior high school commercial electives should be concerned with present values and present experiences of children. Such activities will generally be common

to both children and adults. Junior high school pupils, like adults, are constantly buying, selling, exchanging, consuming, communicating, producing, and recording. In life itself, participation in the business activities of the community is not limited to the mentally inferior; nor does it depend on touch-typewriting or formal bookkeeping."

2. Vocational Objective Too Remote. "Until recently, however, and indeed the practice is still common—commercial teachers in the junior high school have been trying to make typists, bookkeepers, or even stenographers of fourteen and fifteen year old boys and girls. However justifiable such practices may be for a few children, the efforts to superimpose such remote practices and aspirations on all who might elect commercial work * * * have been found to be futile. On the one hand the vocational outlet for fifteen year old typists, stenographers, and bookkeepers is limited; and on the other hand, many pupils will not accept abstract skills as goals for which to strive."² Van Denburg³ states: "It will profit us little if we give our fourteen year old pupil knowledge that he will find useful at twenty-four if at the same time we fail to give him information which will be necessary for his school success at sixteen. The nearer demands of our own work and of the work of the senior high school must be met first."

3. Vocational Objective Not Highly Desirable. "Gradually the commercial teachers who have made occupational surveys, and others devoting time to research in this field, are piling up evidence that not ten per cent of those who are commercially employed are doing bookkeeping or stenographic work. What is more important, it is being shown that these two positions have no monopoly on high salaries or promotional opportunities."⁴

4. Encourages Pupils to Drop Out of School. Briggs⁵ brings out the point that the concrete work and novelty of trade courses attract and send prematurely to wage-earning many pupils who can and should have extended education, either academic or technical.

5. Undemocratic Segregation of Pupils. To quote Briggs again, "It is undesirable to make an early segregation of pupils on the basis of future vocations, thus prematurely stopping the common education that makes for common understanding or integration. Because of the social stigma often attached to the vocational curricula, or rather the positive social distinction associated with the academic, it is difficult to secure registration for vocational training by many pupils who most need it."⁶

6. Repetition. Those who elect the commercial course in the senior high school will be required to repeat the typewriting they have had in the junior high school. We do not believe there is any need for more than two years' study in this subject for the typical commercial student.

¹ Cox, Philip W. L., *The Junior High School and Its Curriculum* (Scribner), page 366.

² Van Denburg, J. K., *The Junior High School Idea* (Henry Holt & Co., N. Y., 1922), page 63.

³ Nichols, F. G., *A Classification of Office Jobs and a Challenge to Commercial Education*, *Vocational Education Magazine*, 2:551-553, March, 1924.

⁴ Briggs, Thomas H., *The Junior High School*, Houghton, Mifflin Co., N. Y., 1920, page 36.

⁵ Briggs, Thomas H., *The Junior High School*, Houghton, Mifflin Co., N. Y., 1920, page 36.

ROOM EQUIPMENT

If the typewriting room is to be used for instruction in typewriting only, the room should be equipped with:

Tables or desks, some in each of several heights from 26 inches to 30 inches.

Chairs which are adjustable as to height.

One make of typewriters in a room, in large schools; mostly of one make in small schools; one or two typewriters of other standard makes are sufficient to give pupils in advanced classes a knowledge of the parts of different kinds of machines. These machines should have blank keys in order to discourage looking at the keyboard.

Dictionaries: One unabridged and several small desk copies.

Cleaning, oiling, and repairing appliances.

A supply closet.

A typewriter-parts wall chart, with the names of the parts covered or cut off. (See section on "Tests and Standards.")

A keyboard wall chart is no longer in favor.

If the typewriting room must be used for office practice as well, office practice equipment should be added to the typewriting equipment. The amount and variety of office practice equipment which should be installed may be determined by a survey of office machines in use in the community and a follow-up study to reveal the kinds of machines pupils may be expected to use in offices after graduation.

The table illustrated in Figure 1 has been found to be most satisfactory for use in the typewriting room. Some authorities prefer single tables to double ones. If single tables are used the same type of construction should be used.

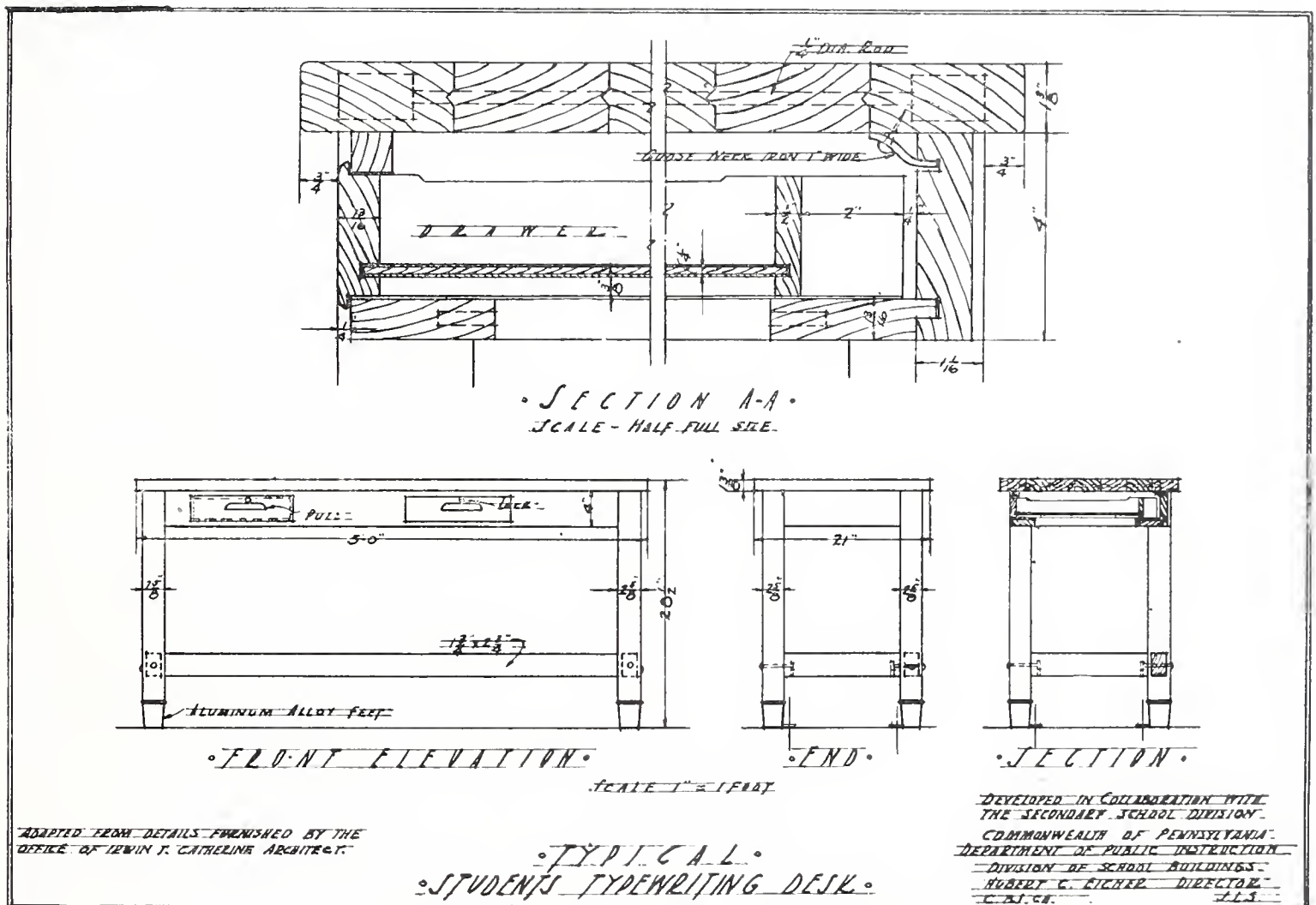


Figure 1—Typical Student's Typewriting Desk

THE TYPEWRITING TEXTBOOK

Since there is an almost infinite number of textbooks published, the following ten suggested points should be considered in the selection of a suitable textbook for the typewriting class:

1. The first step in development of instruction in typewriting is: To teach proper technique. Tech-

nique has been defined as: "The set of habits that constitute mechanically a part of typewriting; the automatic performance of the letter strokes, singly and in their sequence; of copy getting; of manipulation of the machine. It begins as a highly conscious

¹ Mrs. Esta Ross Stuart, Columbia University, Summer Session.

process and finally becomes automatic." The main emphasis in this early phase of instruction in typewriting is how to manipulate the machine efficiently. The second step is: To acquire accuracy. Technique will not be fully acquired when we begin to drill for accuracy, and it is important to remember that absolutely perfect copies are not at first an aim. Accuracy results from poise and control. In the first weeks of instruction on the typewriter, poise and control are entirely beyond the pupil and must be developed. "Control" consists in the voluntary guidance of the performance and involves an attitude characterized by confidence and calmness. It proceeds from a realization of competence and the will to rapid, accurate performance." The third step is: To acquire speed and at the same time to write with proper technique and accuracy. The accuracy stage in the pupil's development may not be reached for three or more weeks after he has begun to use the machine. Speed is of two varieties. In the teacher-conducted drills, rhythm will be used and the speed of performance on the drill, right from the start, is set by the rhythm. In timed tests, technique, accuracy, and speed are all-important factors, but timed tests will not be introduced until the pupil's technique and control are assured. In considering a textbook, make sure that the class drills and individual work are designed to meet these aims of elementary instruction.

2. A textbook for use in high school classes should provide for daily assignments of laboratory exercises instead of long budget assignments. Quite often a pupil is unable to finish a budget assignment in less than from three to five periods. The first individual work assignment should be graded as to length and difficulty and provide enough work to keep the slow pupil busy during one individual work interval. Supplementary exercises will then provide for those who complete the minimum assignment and have time for extra work.

3. The typewriting textbook should contain every type of work, a knowledge of which the pupil should have in order to perform regular office routines. This requirement of a good text does not mean that the teacher should slavishly try to cover every bit of work contained in the book. Community needs vary. It should be the duty of the wide-awake teacher to survey the community in which she is teaching in order to learn what types of work pupils will do upon graduation. This survey can be made in two ways:

One, by keeping a follow-up record of graduates, and two, by visiting the stores, offices, and manufacturing establishments which employ the school's graduates in order to learn what kind and grade of typewriting work is required. With this information in mind, the teacher may then select the exercises which are suitable for teaching the desired skills.

4. The style studies illustrated in the typewriting textbook should be attractive, comprehensive, and well-chosen. Study carefully the style illustrations in order to make sure that they are artistic and at the same time practical for the purpose sought. Great emphasis should be placed upon drill on the particular type of style study which is preferred by those who will employ your pupils.

5. The content of the textbook should arouse and hold the interest. When the labor of acquiring mastery of the typewriter becomes drudgery, the possibility of acquiring success almost vanishes.

6. The print in the good typewriting book should be easy to read, and the paper should not reflect a white glare. Since copy-getting in the process of typewriting is only one of several complicated phases of the work, make sure of the size and clearness of the type. Some recently-published textbooks are equipped with devices for tilting the page to be copied until it lies in an inclined plane. It is easier to copy from an inclined plane than from a level surface, but the plane cannot be elevated too sharply or it will interfere with the movement of the carriage. A strip of sheet metal an inch or more wide and twenty inches long, if provided at each end with a half-inch upturn, forms an excellent rest for the typewriting book. A more stable device is to secure two blocks of wood about three by four inches on the sides and an inch thick. Then nail them together to form a "T." Rest the "T" on the table in an inverted position and drape the textbook over it.

7. Instructions to pupils in the use of the textbook should fit the aims of the teacher's lesson plan. They should be brief and clearly stated.

8. The binding of a good typewriting textbook should be strong and flexible.

9. The material in a typewriting textbook should be organized in such a way that it may be used efficiently in lesson planning.

10. The exercise material used should be rich in thought-content without being didactic.

METHODS IN THE TYPEWRITING CLASS

For a detailed discussion of class management in the shorthand and typewriting class, see Bulletin 66, "Course of Study in Shorthand for Senior High Schools," published by the Department of Public Instruction, Harrisburg, Pennsylvania, pages 13 to 17.

1. "Work position" and "rest position." Some typewriting should be done, if possible, at the first meeting of the class, but the teacher must first organize the class, instruct the pupils concerning correct posture, and the nature of the stroke. Learning to

typewrite is in many respects similar to the drilling of soldiers. The successful typewriting teacher must be a good drill sergeant. However, even the most hard-boiled sergeant does not keep his men too long "at attention." Every soldier knows what "attention" connotes and what "parade rest" means. The good teacher of typewriting will have "work position" and "rest position," and he or she will not keep young people too long under the stress of "work position." For beginners, about ten minutes at one time is suffi-

² Mrs. Esta Ross Stuart.

cient. In the momentary intervals of "rest position" put the class through one of the finger gymnastic drills. A more complete discussion of finger gymnastics is given in the section entitled "Finger Gymnastics."

2. The nature of the stroke. When the proper "work position" has been explained, the second point to be discussed the first day is the nature of the stroke. In this connection, it is distressing to note, from the questionnaire sent out by the State Department of Public Instruction, that out of one hundred and forty schools, only forty-three admit teaching the nature of the stroke and only thirty drill upon the development of the correct stroke. The nature of the stroke is referred to by teachers and authors of textbooks by various names, such as the "tiger stroke," the "snatch stroke," and the "flecking stroke," but the idea which these names should convey is that the stroke to be used is not characterized simply by pressure and is not a direct downward blow. It is a blow in which the finger used strikes the key; does not follow through until the key is fully depressed, but is drawn quickly toward the palm of the hand. The nature of the stroke is taught in a variety of ways. Some teachers have pupils make a large dot on a sheet of paper; lay the paper flat on the desk, and then fleck it or pick at it with each finger in turn. Other teachers have pupils move the carriage of the typewriter to the end of the line where the keys lock. With the keys locked, the pupils practice flecking them until they have learned the correct stroke.

Much harm may be done to technique if correct stroking is not practiced right from the start. The pupil's speed in writing, both immediately and ultimately, also will be much affected by the kind of stroke he uses. In order to make the correct form of stroke automatic, it is necessary to maintain a fairly high rate of speed in stroking right from the first day's drill.

3. Standard paper insertion. An efficient typist centers all of his or her work from the center of the scale. To center in this manner, the operator must make use of what is called "standard paper insertion." Standard paper insertion means: Always putting the

sheet in the same way. It is accomplished by setting the lateral paper-guide where it should be in order to make sure that the center of the paper (along the $8\frac{1}{2}$ inch side) is at the center of the scale.

The steps to be followed in centering the first sheet and setting the lateral paper-guide for subsequent standard insertions are:

- To find the middle of the sheet (along the $8\frac{1}{2}$ inch side), crease the sheet down the middle, then unfold it.
- With the carriage release, set the carriage so that the printing point indicator is at the center of the scale.
- Insert the paper ($8\frac{1}{2}$ inch side) into the machine in such a way that the crease is directly back of the type-guide (where a type would print if a key were depressed).
- Set the inside edge of the lateral paper-guide (it is attached to the paper table or rest) flush with the left edge of the paper.
- It will not be necessary to crease papers and to go through the foregoing steps each time a paper is inserted. If the lateral paper-guide is properly set, any paper which is inserted with its left side against the guide will be properly centered. Every beginning pupil, however, should learn how to set the lateral paper-guide by going through these steps.

In order to demonstrate to pupils how they should go through the steps of determining the location of the lateral paper-guide, the teacher must indicate and name the type-guide, the platen scale, and the carriage-release lever.

4. Setting the "stops" for the desired length of line. The teacher should next indicate and explain the use of the margin stops. If the center of the platen scale is at 40 and the teacher desires pupils to type in a 50 space line, she will next instruct the pupils to set the stop which governs the left-hand margin at 40 less 25 (25 being half of 50, the desired length of line), and the stop which governs the right-hand margin will be set at 40 plus 25, thus:

Crease made in the top of a sheet of paper at "A" in order to center the paper with the center of the scale at 40.

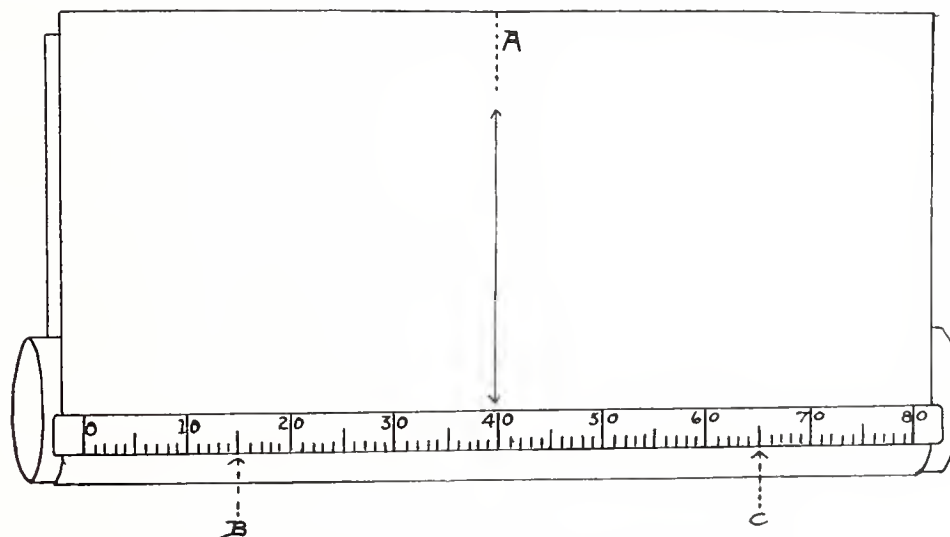


Figure 2—Centering the Paper with the Scale

The parts of the machine which yet remain to be indicated and explained before the first day's typewriting can be undertaken are: Space bar; keyboard—first row next to space bar, second row which is usually called the guide row, third row, and number row; line space lever; and line space adjusting device.

5. The guide row. The second row of keys, counting upward from the space bar, is generally referred to as the guide row of keys. The first four keys in from the left hand side of the keyboard on the guide row are the A S D F keys. Rest the tips of the four fingers of the left hand on these keys. The second, third, fourth, and fifth keys in from the right on the guide row are the ; L K J keys. Rest the tips of the fingers of the right hand on these keys. Each finger should be sharply bent at the second knuckle from its tip, giving the hand a claw-like appearance and the palm of the hand should be tilted upward toward the fingers. In other words, the palms should be about parallel with the slant of the keyboard.

After the pupils have located the guide row and placed their fingers upon the keys, tell them to rest the thumbs on the space bar and the heel of the hand (momentarily) on the metal frame work of the machine in order to test the position of the hand with reference to the guide row. When everyone has established a memory of how the hand feels, as it rests on the guide row, direct pupils to drop the hands to their sides and then without looking to raise them to the keyboard again in order to find the guide row by touch. Drill pupils a few seconds daily for more than a month in finding the guide row without looking at the keys.

6. When errors should count. Errors for a baseball player are recorded and count only when he is a player in a game. When he is practicing in the effort to perfect his technique, they do not count. Likewise, when one is learning to play a musical instrument, errors do not count the first time a piece is attempted. During practice a musician plays through a given selection noting the errors he makes. Then he goes back and practices intensively the chords and measures upon which he is weak. He may find it necessary to practice a certain portion of a composition many times before he can play it without error. We should recognize the soundness of this procedure in learning to typewrite. Many letter sequences are difficult. The beginner cannot execute them with correct fingering and rhythm and without error until he has practiced writing them many times. When the class is being drilled upon new or difficult letter sequences, each individual is practicing, and mistakes made in such drill should not count in compiling his grade for the course. Because mistakes made in practice should not be counted and because most of the period in the first three weeks of typewriting instruction is devoted to drills upon the mastery of the keyboard, teachers should not mark and grade papers which have been written during the first three weeks and they should not demand error-proof papers. Papers written during the drill intervals of a period, however, should be collected and inspected, in order to discover whether or not the pupil is doing what he is told to do and in the way he is told to do it. As soon as the location and correct fingering of each key on the keyboard has been drilled upon and straight

copy work is begun, the pupil should be taught how to proof-read his paper, how to note the number and nature of each error he has made, and how to drill upon the elimination of such errors. For a statement of methods of proof-reading, see paragraph 8.

7. Finger gymnastics. In a discussion of posture it was suggested that teachers require "work position" while pupils are typewriting and that pupils be allowed momentarily to assume "rest position" after about ten or fifteen minutes. It has also been observed by some teachers that pupils need special finger gymnastics to develop the muscular coordination of the hands. Very few of our textbooks make any mention of finger gymnastics. We learn from our statewide questionnaire that an overwhelming majority of teachers make some use of them, and that they are important in developing skill is conclusively demonstrated by the finding of at least one experimenter. In "Research Studies in Commercial Education," III, A University of Iowa Monograph in Education compiled by Dr. E. G. Blackstone, and issued November 1, 1928, Mr. Harold R. Crews reports that he taught typewriting to two groups which were evenly parred so far as age, intelligence, training and general high school marks were concerned. With one of these groups he used finger gymnastics and with the other he did not. The average stroke score on Blackstone tests were: 159.8 for the gymnastics group at the end of nine months; for the non-gymnastics group the average score was 134.

Since the studies which have been made show that typewriting results are greatly improved if pupils have finger gymnastics, we recommend that teachers study the finger gymnastics described in the section on "Finger Gymnastics" and make use of one or more of them in each "rest position" interval during instruction in Typewriting I and II.

8. Proof-reading. The successful stenographer is a careful, accurate proof-reader of his own work. Since the work done in the classroom should approximate as nearly as possible the activities in which people engage in offices, we feel that the successful typewriting teacher will endeavor to make it habitual with every pupil to proof-read everything he types. This habit of proof-reading should be begun during the pupil's fourth period of typewriting instruction and should be insisted upon without fail throughout his period of instruction.

The most satisfactory plan is to set aside for proof-reading about five minutes at the end of each typewriting period. While the pupils are proof-reading, the teacher should read aloud with them the printed copy. In Typewriting I and II, pupils should underscore, check, or draw an oval around words in which an error was made. The total number of errors in each line should be placed at the right hand end of it and the total number of errors for the paper should be written in the lower right hand corner. On the bottom of the paper the pupil should divide the number of errors by the number of lines in order to find the number of errors per line. (See illustration, page 25.) In a notebook each pupil should keep a composite graph showing the number of lines typed and another showing the average number of errors per line. (See illustration, page 26.) The rate of in-

crease in number of lines typed together with the rate of decrease in average number of mistakes per line should be used in determining the pupil's mark in elementary typewriting.

If proof-reading—it should not be called marking—is carried out in the right spirit, it will save the teacher much time, produce better results, and greatly motivate the work.

9. Checking papers. At the beginning of the term all sets of papers which have been proof-read by the pupils should be re-checked by the teacher. As time goes on, it will not be necessary to re-check all sets. When the teacher re-checks, she should draw a big oval, using red or blue pencil, around all errors which were unchecked by the pupil. At first it may be necessary to do no more than call the pupil's attention to his carelessness. If his failure to note all mistakes continues, it may be necessary to impose upon him penalties of increasing severity. At any rate, the teacher will soon learn who are the dependable pupils and their papers will not need much re-checking. The careless pupils must be watched and penalized and every paper of the dishonest pupil must be strictly re-checked. Only in this way can the teacher give him a lesson in the meaning of fair play.

10. Technique—How to assist our pupils to acquire it. The checking of papers should not take so much of the teacher's time that she has no opportunity for recreation or professional reading. Nor should checking be done during the class period. While the class is being drilled by the teacher, as provided in the lesson plans, she will not have time to mark papers. Likewise, during the individual work, pupils need supervision and personal help. The teacher should be moving about the room and up and down the aisles, constantly watching for errors in posture or technique. In Figure 3, opposite, we have reproduced a part of a "Typewriting Diagnostic Chart" which was compiled by Mr. Clay D. Slinker, Director of Commercial Education in Des Moines. If pupils have a chart of this kind the teacher may, in passing about the room, check on it items which should be called to the attention of the pupil. The charts may also be used in determining pupil marks.

11. Marking papers. For the marking of papers in the Typewriting I class we suggest the sorting method. That is, after each set of papers has been proof-read by the pupils and, in some cases, re-checked by the teacher for errors in marking, the teacher should sort them into four piles. In the sorting, take into account the average number of errors per line, the accuracy of the pupil's proof-reading, the amount of work typed, and the general appearance of the paper. The piles into which papers are sorted may be: Excellent, good, fair, and not acceptable. It will usually be found that the "fair" pile is largest. In consequence, after the papers have been sorted, the teacher may have a pupil call off while she records first the marks for pupils who have a paper in the "excellent" pile, then the marks for those who have a paper in the "good" pile, and finally the marks for pupils whose papers are not acceptable. The pupils after whose name no mark has been recorded have a paper in the "fair" pile. It is unnecessary to call off

TECHNIQUE CHECK SHEET									
Date									
A. Position.....									
1. Body.....									
2. Arms.....									
3. Wrists.....									
4. Hands.....									
5. Feet.....									
B. Action.....									
1. Finger.....									
2. Wrist.....									
C. Eyes.....									
D. Paper.....									
1. Inserting.....									
2. Removing.....									
E. Carriage.....									
F. Shift key.....									
G. Space bar.....									
H. Touch.....									
1. Too light.....									
2. Too heavy.....									
3. Uneven.....									
I. Rate.....									
1. Too fast.....									
2. Too slow.....									
3. Irregular.....									
J. Accuracy.....									
K. Arrangement.....									

Figure 3—Technique Checking Chart

these marks. Simply record an "F" in each blank space. In this way it is possible to avoid handling at the time of recording, almost half of the papers.

Since the pupils should be encouraged to keep a daily graph of the number of lines typed and one of the average number of mistakes per line, the teacher would find this record also a valuable aid in grading. For that reason, teachers should request pupils to prepare their graph in duplicate. The teacher's copy is distributed just before the proof-reading interval begins and is passed up at the end of the period.

12. The shift key. Within the first week, pupils should begin to have capital letter drills. According to the stroke count plan followed by E. G. Blackstone

¹Published by The Gregg Publishing Co.

COURSE OF STUDY IN TYPEWRITING

NAME.....CLASS.....PERIOD.....

WRITING DIFFICULTIES

Report to be Made by the Pupil

Check the items of major difficulty. Note additional difficulties on which you need help.

Date										
I. Understanding										
Do not understand use or adjustment of										
1. Paper guide.....										
2. Marginal stops.....										
3. Line space regulator.....										
4. Tabulator stops.....										
5. Paper release.....										
6. Carriage release.....										
7. Margin release.....										
II. Operation										
Need help with										
1. Key stroke.....										
2. Space bar stroke.....										
3. Shifting for capitals.....										
4. Reach to (underscore the reach giving difficulty).....										
q w e r t y u i o p.....										
z x c v b n m , . /.....										
5. Reach to (underscore the reach giving difficulty).....										
2 3 4 5 6 7 8 9 0 - 1/2 ¢.....										
" # \$ % - & ' () * 1/4 @.....										
III. Have difficulty with										
1. Writing rhythmically.....										
2. Writing accurately.....										
3. Keeping up with the class dictation.....										
4. Keeping eyes on copy.....										
5. Curving fingers.....										
6. Individual finger control.....										
7. Wrist motion.....										
IV. List additional difficulties below										

Figure 4—Typewriting Difficulty Analysis Chart

TYPEWRITING DIFFICULTY ANALYSIS CHART

NAMECLASS.....PERIOD.....

TECHNIQUE CHECK SHEET

To the Pupil: Keep this Check Sheet on your desk when operating the typewriter. Your errors in technique will be checked; when you have corrected the inaccurate technique, an O. K. will be given.

Date on which fault in technique was checked . .										
I. POSITION AT THE TYPEWRITER										
A. Body										
1. Sit nearer the typewriter.....										
2. Sit away from the typewriter... ..										
3. Lean from the hips toward the typewriter.....										
4. Shoulders erect.....										
5. Feet on the floor.....										
6. Body well balanced.....										
7. Body relaxed, but not sagging.....										
B. Eyes: On the copy.....										
C. Wrists										
1. Lower the wrists.....										
2. Raise the wrists.....										
D. Fingers										
1. Curve the fingers more.....										
2. Fingers curved too much.....										
3. Finger nails too long.....										
E. Thumbs										
1. Curve right thumb over space bar.....										
2. Curve left thumb under palm.....										
II. OPERATING TECHNIQUE										
A. Machine adjustments.....										
B. Paper insertion.....										
C. Key stroke										
1. Use the snatch stroke (do not punch the keys).....										
2. Touch must be more even.....										
3. Use a lighter stroke (quick get-away).....										
4. Incorrect fingering.....										
5. Use a more forceful stroke (well-controlled).....										
6. Do not raise the fingers so high.....										
7. Relax the muscles of shoulder, forearm, wrists.										
D. Rate										
1. Too fast.....										
2. Too slow.....										
3. Jerky.....										
E. Carriage throw										
1. Too much arm motion.....										
2. Sluggish movement.....										
3. Return the hand to the home keys quickly.....										
4. Throw the carriage with more even power.....										
F. Shift key										
1. Depress more firmly.....										
2. Use the little finger to depress the shift key; hold the other fingers hovering over their home key positions.....										
G. Remove paper										
1. Use the paper release.....										
H. Accuracy										
1. Spell the words.....										
2. Develop a more even rhythm.....										

Figure 5—Another Type of Technique Chart

in his tests, the capital counts two strokes, but in the elementary capital letter drills, the teacher should count three for writing the capital—"one" for depressing the shift key, "two" for striking the letter, and "three" for releasing the shift key. When pupils have become more expert, they will naturally fall into the habit of striking the letter key and releasing the shift key almost simultaneously.

13. Repetitive drill in typewriting. It is an advantage to introduce capital letter drills as soon as possible because sentence writing greatly motivates learning to typewrite. Pupils also waste time if they write the same word consecutively more than three times. When pupils write the same word over and over again, they lose interest. Practice which does not force concentration, and, in the elementary stages, the naming to one's self of the letter struck, is largely a waste. Pupils who were writing five "perfect" lines of "late" were observed to say: "1 2 3 4 space, 1 2 3 4 space," instead of: "l-a-t-e space." When pupils type sentences, the constantly changing letter sequences force the closest kind of concentration on what is being written.

14. Carriage throw drill. Direct the pupils to set the margin stop which controls the left hand side of the scale at 40. Show the pupils how to set a tabular stop at 60 and clear the tabular rack of all stops between 40 and 60. Show pupils how to raise the hand from the guide keys to the space lever. Tell them to set the carriage at 60; to return it to 40. Did they give it a throw sufficient to cause the carriage to reach the beginning of the line without following through? Did they catch the spacing lever with the index finger near where it joins the hand (in the case of the left hand throw)? With the third finger near the first joint in from the tip of the finger (in the case of the right hand throw)? Direct pupils to touch the tabular key, then to return the carriage again. Have them repeat this operation several times.

15. Steps in learning to typewrite. A common practice in typewriting classes is to have pupils start at the beginning of a new textbook and type strictly according to directions all they can do each day for a term. On the basis of this experience, teachers sometimes make certain modifications in the directions given in the text in order to make it possible for the class to cover more of the text. In larger schools, the head of the department sometimes calls a meeting at the end of the first semester in order to arrive at some consensus of opinion among his typewriting teachers concerning the part of the textbook which should be covered in a semester. There is quite frequently no attempt to evaluate the exercises in the text in terms of teaching worth.

Teaching worth should have reference to the kinds and type of nonsense letter sequences used for determining location and reach. This type of exercise is overdone in some textbooks. Teaching worth also has reference to vocabulary and spelling. Drills upon highly infrequent words are a waste and excessive drill upon some of the commonest words with no drill upon other common words shows a lack of understanding and efficient organization of drill material. The kinds of exercises used should have reference to

the sequence of steps in development and to the kind, number, and nature of forms taught. When pupils are ready to begin upon form-work, the teacher should know what form-work will be of greatest help to pupils in the community in which they are likely to work. For instance, if we spend a great deal of time upon legal forms, when few, if any, of our pupils are likely to ever work in a lawyer's office, we show poor understanding of our problem.

In view of the foregoing considerations, we detail here before proceeding to give typical lesson plans, the steps in learning to typewrite which every teacher of typewriting should have in mind in order to make effective lesson plans:

- a. Mastery of an efficient technique in fingering the keyboard and automatic manipulation of the moving parts of the typewriter by touch. In the development of this skill, accuracy and speed are not the main consideration at first. In time, first accuracy and then speed become equally as important as technique, but in the lesson plans herein suggested, approximately twenty-five lessons are devoted to technique, twenty-three to technique with accuracy, and twenty to technique with accuracy and speed.
- b. Acquisition of efficient, accurate copy-getting. Copy-getting involves automatic, touch operation and manipulation; taste and skill in arrangement; ability to read and comprehend ordinary print, rough drafts, and shorthand notes; a thorough knowledge of frequently-recurring words; and the common forms of punctuation.

In the development of this mastery, it is most helpful if the teacher can demonstrate touch operation with rhythm. For this reason, superintendents and school administrators now feel that the able teacher of typewriting is one who can do what she expects the pupils to do. Before giving demonstrations on any phase of instruction, the teacher, quite naturally, should prepare herself carefully to give an efficient demonstration. Pupils are suspicious of alibis, and nothing motivates instruction in typewriting so much as seeing the teacher do it.

Some of our more expert teachers reserve a typewriter for their own use and have it mounted on a stand about breast high. Stands which are adjustable as to height may be procured from office furniture dealers, but if the supply department of the school district cannot or will not supply them, "necessity is the mother of invention." Procure a box or filing section of sturdy construction and tall enough, when perched on the end of the desk or a table, to elevate the typewriter sufficiently for your use while standing. Mount the typewriter on this box and standing sideways to the class, it is possible for the teacher to demonstrate, while the pupils watch, strokes, fingering, rhythm, and the typewriting of exercises. On the drills which are presented during the first three weeks of the term, it is an advantage for the teacher to frequently type with the class, especially if the copy is on the board and the rhythm is determined by metronome, phonograph, or the count of one of

the pupils. It is not well for the teacher to attempt to ride too many horses at one time.

c. Acquisition of a knowledge of and ability to make use of approved and tasteful styles of arrangement. In the acquiring of this skill, the pupil should make copies first of forms which are placed before him in facsimile typewriting. These facsimile forms should be accurate in detail and tasteful in arrangement. Never place before pupils a form which is defective. Also, before the pupil begins to copy a form, call the excellent features of its style and arrangement pointedly to his attention. Pupils are sometimes indifferent observers. They may not see important points and certainly will not understand the most efficient methods of getting them unless the teacher is able to demonstrate. Do the style studies in the text you are using include all of those in common use? (Suggested Style Studies are illustrated on pages 59 to 67.)

d. When the pupil knows what constitutes correct form, then he should be drilled in constructing similar forms. He has first of all made exact copies of forms which are represented to him by the teacher and the author of his textbook as being worthy examples of accuracy and taste. His second step should be to copy matter from one form into another. This aim may be accomplished by having him copy a letter which is illustrated in his text in indented style, or in one of the other styles. Later steps in developing a sense of style and arrangement would provide for copying and arranging letters which are set in ordinary type but without letter arrangement; copying matter set in ordinary type without arrangement, capitals, or punctuation; copying from rough drafts; copying from printed shorthand, and transcribing from his own notes. Almost all pupils everywhere would profit from drill on the letter forms. Other kinds of papers in which skill and taste may be desirable are the many types of business forms and in some cases legal forms.

16. Care of the machine. The typewriter is a sturdy machine. It is capable of withstanding a great deal of abuse, and the wonder is not that it gets out of order now and then, but that it holds up as well as it does.

The foregoing statement is especially true of the classroom typewriter and the repairman is full of most significant stories. They tell of stolen parts, type-bars deliberately bent and twisted beyond use, and other kinds of vandalism. If pupils cannot be trusted to take proper care of other people's property, that fact is an indictment of the school and the teacher. It is far more important to teach pupils honesty and decency than to teach them typewriting, or anything else.

But cases of vandalism are not the only type of abuse and destruction of typewriters. A visit to many classrooms will reveal that the machine is dirty, the segment is full of rubber crumbs, the type are clogged, the ribbon is frayed, and some part of the machine is jammed, rendering it unusable. From a state-wide questionnaire on typewriting conditions, we learn

that only one hundred and seven schools make an attempt to care for the machines. Of these schools, twenty-seven have definitely-assigned cleaning drills and twenty-six give teacher demonstrations of how to clean and care for the machine.

Pupils who become stenographers will be expected to keep their desks and machines tidy. It is essential, therefore, that all pupils should be taught how to clean and care for their machines and should be drilled frequently in cleaning up, adjusting jammed parts, and making minor repairs. Pupils who attend a school which does not offer office practice should be taught how to change ribbons as part of the practice of cleaning and caring for the machine. Pupils who know how to change ribbons, can adjust ribbons that become twisted. In winding back and forth from spool to spool the wind becomes looser and looser. Sometimes it is so loose that it more than fills up the available space about the spool and causes the ribbon mechanism to jam. By holding lightly one spool and winding the ribbon onto the other, the wind may readily be tightened and this difficulty overcome. If the teacher or some of the pupils understand how to make such minor adjustments, many repair bills will be saved and the pupil who is idle because his machine is out of order will not suffer so much lost time.

Reverting to the subject of cleaning the machine, every class should clean and dust the machine and desk once a week. If a typewriting room is in use daily by five different classes, one class should clean the machines each day. Do not oil the machines oftener than once a month and then use oil sparingly. The baring rods are, in the case of most makes of machines, the only parts that need oil. The safest plan in the matter of oiling is to follow the instruction book which is supplied with each machine.

Two successful methods of handling the supply of brushes and cleaning cloths are suggested. If these things are left in an unlocked drawer of the desk, they will in many cases disappear. Where it is feasible to lock the drawer of the desk, the teacher should have one master key for each row of desks. This master key should be wired to a stick of wood approximately a foot long. The end of a broom handle is quite satisfactory. At cleaning periods for any given class, one of these keys can be passed down each row, retained by the pupil in the rear seat, and passed back to the pupil in the front seat after the drill is ended and the drawers are locked. Another method of caring for such supplies is to have them in a box in the closet and deal out to each row one each of the necessary brushes and cloths. As each pupil uses a type brush, he passes it back; then he dusts the machine and type-bar segment with the dust brush and passes that back and finally wipes his machine clean with a cloth. The pupil in the rear seat of each row is responsible for the return to the teacher of both brushes and the cloth. In a class which is well-organized and managed by teacher-assistants, this sort of drill can be carried through by appointed pupils in a very few minutes.

17. The eraser—When to use it and how to teach the use of it. One prolific cause of dirt in the typewriter is the frequent use and often the misuse of the eraser. Do not allow the use of the eraser until pupils

enter the last semester before graduation, then teach them how to use it. The proper way to use the eraser is to move the carriage to one side of the machine or the other while erasing, in order to prevent rubber crumbs from dropping into the type-bar segment, to roll the paper up about five single spaces, and to hold the paper firmly against the platen with one hand while erasing with the other. The eraser used should not be too harsh or gritty and the pupil should not bear down too heavily.

18. Summary. Learning to typewrite involves in a high degree the problem of habit formation. It is important for the teacher of typewriting to know what are correct typewriting habits and how to drill upon them until the pupil's reaction through the use of them is quick, accurate and automatic. If correct habits are drilled in during the early periods of instruction it will not be necessary for teachers and pupils later to labor so hard on corrective drills.

Pupil proof-reading and scoring is not only an advantage to the teacher; it is also the best practice for the pupil. Through properly conducted pupil proof-reading and scoring tests, pupils should learn that they are not in conflict with the teacher but that they learn most advantageously when they cooperate to the fullest extent with the teacher. They should learn also that they are not in a contest with others, but in a daily contest to improve their own previous record. In this way pupils come to realize that the will to use proper technique, coupled with accurate proof-reading, will enable them to discover what

errors they are making, why they make certain errors, and how they may apply effective remedies.

Methods of assembling the data upon which to base correct diagnosis, as it relates to technique, are suggested on pages 13, 14, 15. Suggestions as they relate to the arrangement of the beginning pupil's typewriting paper, the checking of his errors, and the assembling of data concerning the nature of the errors made, are provided on pages 25, 27 and 28. With this data assembled, two important things should be done. The teacher should study the summarized data bearing on the pupil's errors, and prescribe an effective remedy.

In the introduction to each group of lessons which are outlined in following sections of this course, the committee suggests that one of two plans be followed:

1. According to the first plan the teacher should prepare lesson plans for four lessons a week, reserving the fifth lesson for a practice-out period. In this practice-out period, the pupil should record the errors he has made in his preceding four lessons, practice on the syllables, words, phrases and sentences in which errors occurred and also on a special, corrective drill to be prescribed by the teacher.
2. According to the second plan, in the self-reliance work of each day's lesson, practice-out the errors made in the previous day's work and also type prescribed corrective drills.

Excellent corrective drills are provided in most modern textbooks.

LESSON TOPICS, AIMS, AND PLANS

Lesson planning is important and it is necessary that the teacher know the factors involved in it. Thomas says:¹ "Reduced to its lowest terms, the process (of teaching typewriting) seems extremely simple. It merely consists in repeating correctly a drill until it becomes automatic. The task of securing sufficient correct repetitions to insure the reliability and permanence of the habitual response, however, involves a number of factors which often call for the utmost resourcefulness and skill on the part of the teacher. Among these are the problems of making a correct start; safeguarding against errors in practice; securing and maintaining attention and co-operation, even when drill has become monotonous and uninteresting; distributing practice in the most

profitable and economical manner; and measuring progress with sufficient reliability to avoid the errors of too much or too little practice. The multiple character of these responsibilities, combined with the fact that the process must continue in every case over an extended period of time, thus necessitating repeated returns to the task, makes the procedure one which merits the most careful analysis and study by the teacher who is to undertake the effective direction of this type of learning activity."

In other words, the teacher must have a clear mental picture concerning what is to be accomplished in the time available. We cannot leave such matters to the author of a particular textbook. Since, therefore, we have approximately ninety forty-five minute periods in each of four semesters according to the program-placement suggested on pages 7 and 8, we have made the lesson plans presented on the following pages.

¹ Thomas, F. W., *Principles and Technique of Teaching*, Houghton, Mifflin Co.

Lessons in Typewriting

First Group of Lessons

In the first group of twenty-five lesson plans the objective should be to acquire correct technique. In this endeavor the pupil need not be conscious of the elements of speed and accuracy. The main emphasis should be upon posture, the proper care of the machine, and the way typewriting is done. In this development practice is confined almost exclusively to the five hundred commonest words according to the Horn List. The suggestions made in this course are not based upon any particular textbook. The plans suggested may be varied to suit any textbook the school may choose. Should the lessons, as herein arranged, prove to be too long, the teacher can and should abridge them. On the other hand, if they are too short, teachers will find it equally easy to supplement them by introducing more repetition.

One topic or objective heads each lesson plan. It is: Learning the technique of manipulation by touch and, as soon as possible, automatically. The lesson aims, because they are specific, vary with each lesson.

PLAN FOR LESSON ONE

A. Pre-Lesson Procedure by Teacher.¹

1. Name of course: Typewriting.
2. Topic of lesson: Acquiring the technique of keyboard operation and the manipulation of certain parts of the machine automatically by touch.
3. Aim of Lesson One: To organize the class; to demonstrate and have the pupils practice correct posture; to demonstrate and have pupils practice the correct kind of stroking; to indicate and explain the use of the fourteen parts of the machine which the pupil must know in order to type his first lesson; to indicate and have pupils practice finding "home" position; to teach the location and stroking of ju7ujm and fr4rfv; to give the pupils their first instruction in how the machine and its cover should be left at the end of the period.
4. Assumed knowledge: Tenth year reading ability, tenth year spelling ability, tenth year ability to punctuate.
5. Materials of instruction: See that sufficient paper is available in order that the supply clerk may distribute enough to the aisle managers to give each pupil one piece; that the machines are in good working condition, and that sufficient blackboard space is clean and available.

B. Lesson Procedure by Teacher and Pupils.

1. Establish a favorable mind set by organizing the class quickly and in an orderly, businesslike manner. Direct pupils to open desks or to remove covers from the machine. In the case of rubber covers, require pupils to drape them while typewriting over the back of the chair in which they sit.
2. Describe and demonstrate "work position" and require pupils to assume alternately several times "work position" and "rest position." Observe the "work position" of individuals and criticise in a good-natured, constructive manner the faulty position of those who need correction.
3. Demonstrate and have pupils practice the correct kind of stroking. Methods of teaching stroking are discussed in paragraph two of the section entitled "Methods in the Typewriting Class."
4. As the pupil inserts a paper in the machine, indicate and explain the use of each of the following fourteen parts:

1. Paper table or rest	8. Carriage release lever
2. Platen	9. Lateral paper guide
3. Platen knobs	10. Margin stops
4. Paper release lever	11. Space bar
5. Scales	12. Keyboard
6. Type guide	13. Line space lever
7. The carriage	14. Line space adjusting device

¹ This first lesson plan is given in detail. Except for the aim, the "A" portion of subsequent lesson plans will be omitted.

COURSE OF STUDY IN TYPEWRITING

5. Indicate the second row of keys. These are the "guide row" keys; have pupils practice placing their hands on these keys and dropping their hands to their sides or laps. Several times they should alternately find the guide row by touch and then remove their hands.
6. Lesson work: (Direct each pupil to head a paper in pencil with his name, section, date and "class work." "Class work" is to be demonstrated by the teacher and typed to her count or to music.)

jjj fff jjj fff jjj fff jjj fff jjj fff jjj fff jjj fff jjj fff
 jjj fff juj frf juj frf jjj fff juj frf juj frf jjj fff juj frf
 jjj fff jmj fvf jmj fvf jjj fff jjj fff jmj fvf jmj fvf jjj fff jjj fff
 jjj fff ju7uj fr4rf ju7uj fr4rf jjj fff jjj fff ju7uj fr4rf ju7uj fr4rf
 jjj fff ju7uj fr4rf ju7uj fr4rf ju7uj fr4rf ju7uj fr4rf ju7uj fr4rf

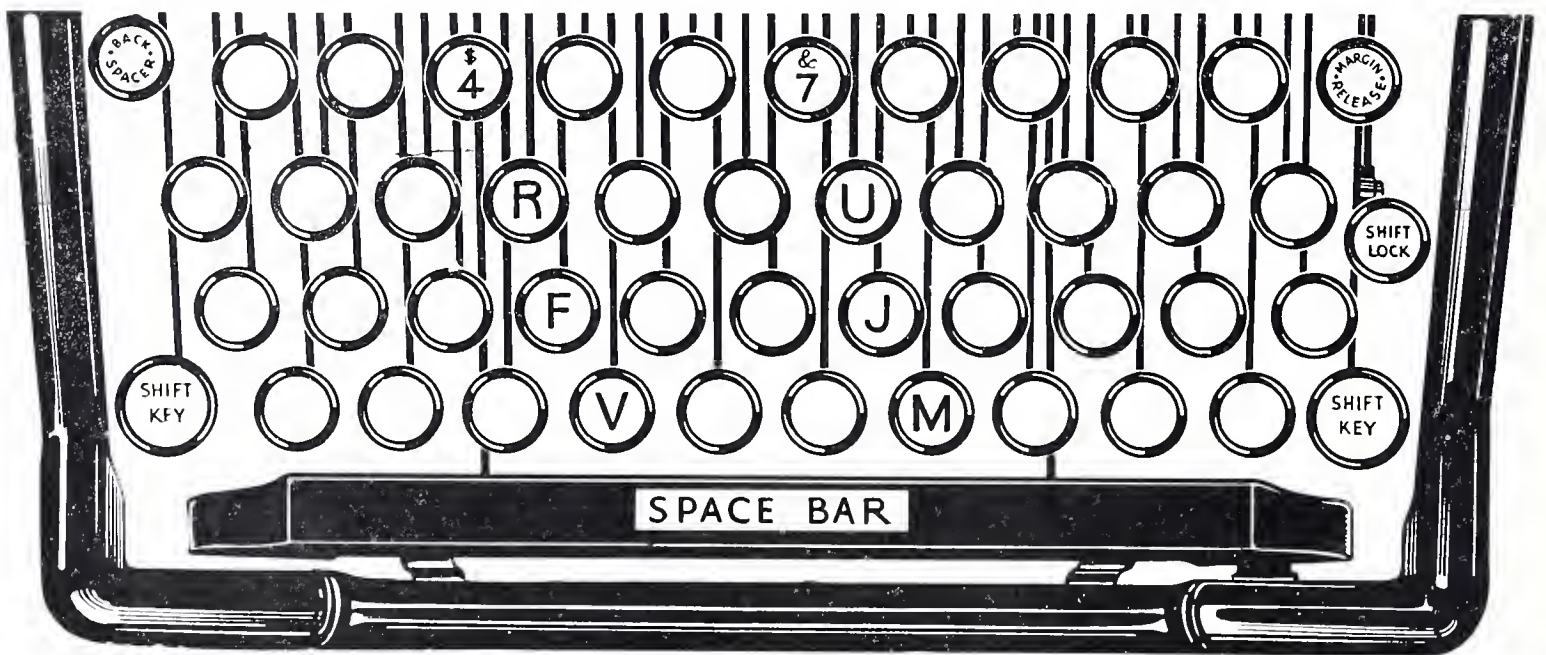


Figure 6—First Key Group Taught

Note: The following plan of approach follows the vertical development of the keyboard advocated by some authors. That is, we begin in the middle of the keyboard with the strongest and most agile finger and learn at one time all the keys associated with each given finger. Other textbook authors favor the horizontal method of learning the keyboard, as exemplified in the asdf;jk; exercise.

The vertical method follows the discoveries of psychological investigators closely. According to these experts, tapping is what we do when we alternately raise and lower the same finger. A trill is accomplished by the alternate tapping of two fingers and a roll results from tapping successively and rapidly all fingers. Taps are slower but stronger; trills are the second gear speed of the hand, but less strong and secure. The high gear speed of the hand is suggested by the roll. Through the vertical approach we begin with single finger tapping. In other words, we use the strongest finger first and learn one thing at a time. The horizontal approach begins with a roll, instituted by the smallest and weakest finger. There is also less association of finger with key, through the horizontal approach.

Do the self-reliance work, the class work, and the individual work just as they are developed in these lesson plans. Some teachers may think that not sufficient repetition is provided. No one has made a convincing study concerning the value of repetitive drill in typewriting. We do know that if the same thing is repeated in drill more than three times, attention wanes and drill without attention is futile.

If teachers find later, through error analysis, that pupils have not had sufficient drill on any specific skill, additional and corrective drills are provided. One of the greatest wastes in educa-

tion is overlearning. Oftentimes, this overlearning is confined to a few knowledges or skills at the expense of other and equally important knowledges and skills.

Do not overlook the suggestion that in the first twenty-five lessons, technique is the most important aim and that lessons are provided in the next twenty-three lessons which are similar in content, except that accuracy and technique are the dominant aims. Thomas says:

"In addition to the visual and auditory mental images, there is another kind which is of extreme importance in guiding correct practice, but which is much neglected by many teachers. It is the kinesthetic or motor image, in accordance with which we direct our practice toward countless everyday skills. One must usually first get the muscular 'feel' of the activity before progress can be made in such skills as 'fingering' a musical instrument, shifting the gears of an automobile, using a typewriter, learning dance-steps, or acquiring the various kinds of manipulative dexterity called for in the kitchen, the shop or the office. The success of a teacher of handwork or crafts classes is primarily dependent upon being able to help the pupils to get the necessary motor image of each process, and no amount of mere telling, lecturing, or criticising clumsy work will compensate for an inadequate initial image. On the other hand, pupils often give audible evidence of their delight at getting the 'feel' and mental pattern of some difficult process. Such pupils know, of course, that they are still far from a satisfactory degree of skill in performance, but they also know that they now have securely with them the mental pattern by which to guide and correct their practice, and are confident of sure progress in acquiring the desired skill."

LESSON PLANS FOR FIRST SEMESTER

7. Two minutes before the end of the period, instruct pupils to remove papers from the machine; to center the carriage; to move the margin stops as near to the center as possible in order to lock the carriage, and to place the cover on the machine.

Note: Instead of the keyboard wall-chart, teachers now prefer to use individual charts or no chart at all. The use of a chart makes it necessary first to locate on the chart the keys to be struck, and second to locate them on the keyboard. This dual location introduces, according to some thinkers, an unnecessary step in determining which key is to be struck. We are all agreed that in the most elementary stages of the learning process, pupils must first learn the location of the key to be struck, which finger is involved in the key operation, and the reach necessary from "home" position. Furthermore, we must establish a memory of the reach and a memory of the feel of the movements to be

made in operating each and every key. This memory of motion and feel results in a kinaesthetic sense. In other words, a nerve path from stimulus (the printed letter) to response (the correct striking of the appropriate key) must be established before automatization can result. Automatic responses are, of course, what we seek in typewriting. See the definitions of technique and control, in the section entitled "The Typewriting Textbook." A more complete discussion of the psychological principles involved will be found in Book, Learning to Typewrite, and Clem, The Technique of Teaching Typewriting. (A helpful chart for beginners is illustrated herewith.)

PLAN FOR LESSON TWO

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson Two: To review the aims of Lesson One; to teach the meaning and use of self-reliance work; to teach the h y 6 y h n h and g t 5 t g b g locations and reaches.

B. Lesson Procedure by Teacher and Pupils.

1. Review "work" and "rest positions."
2. Oral quiz on the names and use of the fourteen parts of the machine which were indicated and discussed in Lesson One.
3. Drill upon inserting, straightening, and silently removing paper from the machine.
4. Review correct stroking.
5. Drill upon finding "home" position by touch.
6. Explain "self-reliance work." (Every day as soon as the pupil enters the room he procures one sheet of paper from the teacher's desk or other designated depository, passes at once to his seat, and begins to typewrite the exercise which has been noted on the board as review or self-reliance work. Before beginning to use the machine the pupil should examine its condition in the following manner:)
'Drape the rubber cover over the back of the chair.



Figure 7—Second Key Group Taught

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<i>Parts to be Inspected</i>	<i>How Inspected and Tested</i>
Cover.....	Was it on the machine? Is it over the back of the chair now?
Spacing action.....	Tap space bar several times.
Carriage.....	Run carriage back and forth.
Bell.....	Note whether the bell rings.
Ribbon action.....	Note if the ribbon feeds.
Vibrator.....	See if ribbon is twisted.
Ribbon spools.....	Examine ribbon on spools.
Stencil lever.....	Notice position of lever.
Line space gauge.....	Examine scale.
Line space release.....	Note position of lever.
Paper side guide.....	Note position on paper table.
Marginal stops.....	Note position on scale.
Paper release.....	Note position.
Shift key.....	Depress the shift key which releases the shift lock.
Type bars.....	Examine basket.
Type face.....	Examine first line of writing.
Set marginal stops.....	After deciding on the length of line to use.

If your typewriter is not in proper writing order, report the fact to the instructor. If you find an OUT OF ORDER tag on your machine, report to your instructor for assignment to another machine.

7. Class work: (Direct pupils to head a paper in pencil with name, date, section, and "class work." "Class work" is to be demonstrated by the teacher and typed to her count.) Conduct a carriage throw drill:

REVIEW: j j j f f f j j j f f f j j j f f f j j j f f f j j j f f f j j j f f f j j j f f f j j j f f f
NEW: j h j f g f j h j f g f j h j f g f j h j f g f j h j f g f j h j f g f j h j f g f j h j f g f
REVIEW: j u j f r f j u j f r f j u j f r f j u j f r f j u j f r f j u j f r f j u j f r f j u j f r f
NEW: j u y u j f r t r f j u y u j f r t r f j u y u j f r t r f j u y u j f r t r f j u y u j f r t r f j u y u j f r t r f j u y u j f r t r f
REVIEW: j u 7 u j f r 4 r f j u 7 u j f r 4 r f j u 7 u j f r 4 r f j u 7 u j f r 4 r f j u 7 u j f r 4 r f j u 7 u j f r 4 r f j u 7 u j f r 4 r f
NEW: j u 7 6 7 u j f r 4 5 4 r f j u 7 6 7 u j f r 4 5 4 r f j u 7 6 7 u j f r 4 5 4 r f j u 7 6 7 u j f r 4 5 4 r f j u 7 6 7 u j f r 4 5 4 r f
 j h f g j h f g j h f g j h f g j h f g j h f g j h f g j h f g j h f g j h f g j h f g j h f g j h f g j h f g j h f g
 j h y h j f g t g f j h y h j f g t g f j h y h j f g t g f j h y h j f g t g f j h y h j f g t g f j h y h j f g t g f j h y h j f g t g f
 j h n h j f g b g f j h n h j f g b g f j h n h j f g b g f j h n h j f g b g f j h n h j f g b g f j h n h j f g b g f j h n h j f g b g f
 j u g j u g j u g h u g h u g h u g t u g t u g t u g r u g r u g r u g m u g m u g m u g b u g b u g b u g

8. Two minutes before the end of the period, instruct pupils to remove the paper (how); to center the carriage; move the margin stops as near to the center as possible; and to cover the machine. Aisle managers (first pupil in row) should be asked to report on the condition of the row. (Have all papers been passed up and placed on the teacher's desk? Is paper on the floor? Are machines centered and covered?) Dismiss the class.

PLAN FOR LESSON THREE

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson Three: To review the aims of previous lessons; to teach the ki8ik,k and de3edcd locations and reaches. See Figure 8.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: Direct each pupil to write in pencil at the top of a sheet of typewriting paper his name, class, and "self-reliance work;" to drape the rubber cover over the back of the chair and check the condition of the machine. For self-reliance work to write:

my rug my rug my rug my rug my rug my rug my rug my rug my rug my rug my rug
tug my rug tug my rug tug my rug tug my rug tug my rug tug my rug tug my rug
hug my jug tug my rug hug my jug tug my rug hug my jug tug my rug hug my jug

Instruct pupils to rewrite the foregoing exercise if time permits. Allow not more than ten minutes. (Call "Rest position" and give one or more finger gymnastic drills.)

¹ Mimeograph the instructions for the care and inspection of machines and require pupils to paste a copy of them in the back of the typewriting book for ready reference.



Figure 8—Third Key Group Taught

2. Review by quiz and drill "home position"; the correct stroke; the parts of the machine; inserting, straightening, and removing papers from the machine.
3. Class work: (Demonstrated by the teacher and written to her count. Before beginning the class work, pupils should write on their papers "class work." Review the carriage throw drill described in Lesson Two. Direct pupils to set the lefthand margin stop at 30 and the tabular stop at 70.

REVIEW: j j j f f f j j j f f f j u j f r f j u j f r f j h j f g f j h j f g f j n j f v f j n j f v f
 j u 7 u j f r 4 r f j u 7 u j f r 4 r f j h y h j f g t g f j h y h j f g t g f j u y u j f r t r f
 NEW: k k k d d d k k k d d d k k k d d d k k k d d d k i k d e d k i k d e d k i k d e d k i k d e d
 k i 8 i k d e 3 e d k i 8 i k d e 3 e d k i 8 i k d e 3 e d k i 8 i k d e 3 e d k i 8 i k d e 3 e d
 k , k d c d k , k d c d k , k d c d k , k d c d k , k d c d k , k d c d k , k d c d k , k d c d
 k i c k k i c k k i c k j u d g e j u d g e j u d g e k i c k k i c k k i c k j u d g e j u d g e j u d g e
 r i g h t r i g h t r i g h t f i g h t f i g h t f i g h t m i g h t m i g h t m i g h t r i g h t r i g h t

LEFTHAND

DRILL: f e d f e d f e d g e t g e t g e t b e t b e t b e t f e d f e d f e d g e t g e t g e t b e t b e t b e t

RIGHTHAND

DRILL: h i m h i m h i m h u m h u m h u m i n i n i n j i m j i m j i m h i m h i m h i m h u m h u m h u m

4. Two minutes before the end of the period, instruct pupils how to cover and leave the machine. Have papers passed up to aisle managers; have them check the order and cleanliness of rows, and dismiss the class.

PLAN FOR LESSON FOUR

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson Four: Review the aims of Lesson Three.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Direct pupils to head papers and each section in pencil. All of the work of the period is to be written on one sheet using both sides if necessary. Do not wait for pupils to finish. Stop promptly at the end of ten minutes.)

get him get him right get him right in time get him get him right get him right
 bet him he might judge them bet him he might judge it bet him he might be right
 my judge might be right he might be right fight right fight right he might fight

(Conduct a one minute finger gymnastic drill.)

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Note: Distributing Practice: (The Intervals in the Typing 'Class.) Everyday experience suggests that the most economical way to acquire skill is through distributing practice by intervals over a reasonably prolonged period, rather than through attempting continuous and concentrated practice. Scientific studies corroborate this impression, and indicate that the most effective distribution of intensive practice in the ordinary drill-subjects calls for shorter daily periods than have usually been considered adequate. In the matter of handwriting, Freeman concluded from his studies that ten to fifteen minutes daily constituted the most advantageous arrangement. Similarly, Courtis was convinced, from careful studies of progress in mastering the fundamental operations in arithmetic, that "ten minutes a day, day after day, has proved adequate to develop proper habits of speed and accuracy." Studies in other fields have yielded results in substantial harmony with these conclusions, although there is considerable variation, dependent upon the nature of the activity practiced. In view of these facts, the "work position" incident to typewriting should not be maintained for more than ten or fifteen minutes in beginners' classes. Between each interval of the typewriting period, conduct at least one finger gymnastic drill.

Principles Affecting Distribution of Practice: The distribution of practice indicated above finds its basis in two facts, the necessity for maintaining alert attention, and the consequent waste that results from continuing practice beyond the period in which vigorous intensive effort can be assured. Even in well-motivated lessons it is rare that an effectively high degree of attention can be maintained for more than fifteen to twenty minutes of continuous practice. Second, inasmuch as certain neural adjustments in the form of synapses must be established, it follows that time must be allowed for growth.

There are, of course, situations where the immediate need of a fair degree of skill is of sufficient importance to justify the less economical plan. For example, an individual who faithfully practices on a typewriter five hours a day for ten days, should acquire by the end of that time a fair degree of skill of an amateurish sort, but his movements will lack the deftness, ease, and accuracy that he could have attained by practicing one hour a day for fifty days. In the first case, his psycho-motor adjustments have not had time to develop normally. Such skill as is acquired under a forcing process is likely to be lost quickly unless it is made permanent by an extended period of use.

2. Class work: (Fifteen minutes.)

Conduct the carriage throw drill described on page 16. For this drill set the margin and tabular stops at 15 and 75, respectively.

(Demonstration by the teacher. Write it to her count. Before beginning Part 2, write "class work" in pencil as a heading for this part of the paper.)

Left hand—

be be be bet bet bet bed bed bed be be be bet bet bet bed bed bed be be be
beg beg beg red red red fed fed fed beg beg beg beg red red red fed fed fed
fee fee fee get get get beg beg beg fee fee fee get get get beg beg beg

Right hand—

in in in inn inn inn in in in inn inn inn in in in inn inn inn in in in
him him him hum hum hum him him him hum hum hum him him him hum hum hum

Both hands—

me me me by by by he he he me me me by by by he he he me me me by by by he
it it it if if if the the the her her her it it it if if if the the the her
met met met net net net jet jet jet met met met net net net jet jet jet met
cut cut cut try try try dry dry dry cut cut cut try try try dry dry dry cut
fry fry fry cry cry cry fry fry fry cry cry cry fry fry fry cry cry cry fry

Cap—

itals—Ii Ii Ii Ii Ii Ii Ii Ii Ii Ii Ii Ii Ii Ii Ii Mm Mm Mm Mm Mm Mm Mm Mm Mm Mm
Dd Dd Dd Dd Dd Dd Dd Dd Dd Dd Dd Dd Dd Dd Ff Ff Ff Ff Ff Ff Ff Ff Ff Ff

(Conduct a one minute finger gymnastic drill.)

3. Individual work: (Twenty or more minutes.) (Pupils should write "individual work" in pencil as a heading for this part of work.)

I cry if I cry I cut if I cut if I cut it I met I met it I met it in the inn
I cut I cut it dry I fry I fry it dry I fry in the inn I get it I get the fee
I get the fee if I fry I fry in the inn I fed it in the inn I fed it in her inn
In her inn in my inn in the inn cry fry cut met he met her in the inn get him
Get him in the inn the net in the inn get him in the net in the inn cut the net

4. Proof-reading: (Last five minutes.)

Read the individual work assignment while the pupils circle any words in which errors have been made. After all errors have been circled, have pupils note in the righthand margin the number of errors made in each line. They should write the number of lines, number of errors, and average number of errors per line at the bottom of the paper. (See illustration of a marked paper on page 25.)

Note: One point closely connected with motivation in practice-activities deserves special emphasis. This is the fact that the most effective practice is, in a rather intimate sense, self-directed. By this is meant that the learner sets or accepts a goal, and then takes upon himself the task of working toward it. The progress of the child who sets about learning to typewrite in order that he may be able to send a typed letter to a favorite relative or friend, is in marked contrast to that of the pupil whose practice is teacher-inflicted, no matter how skillfully the outside direction is imposed. For that reason, we favor having pupils proof-read everything they write. After proof-reading, the pupil should note the number of lines typed and the ratio of

errors to lines. If these results are kept by pupils daily in graph form, they may compete each day with their previous best record. (See pages 26 to 28.)

The feeling on the part of the pupils that they are sharing with the teacher the responsibility of directing their own learning always makes a vigorous appeal to their interest, and the resultant progress almost always is gratifying beyond expectations. In the best schools of today there is a marked tendency toward developing greater independence and self-direction on the part of the pupil. Pupils can keep and understand a graph and they not only appreciate the advantage to themselves of regulating their practice according to it, but also enjoy the game of trying to beat their own records.

ARRANGEMENT OF A PUPIL'S TYPEWRITTEN PAPER

5. Before dismissing the class, check, through the assistance of the aisle managers, the condition of the floor, centering and covering of machines, whether all papers have been handed in and arranged alphabetically.

In order to provide properly for individual differences, use these lesson plans for four days of the week. On the fifth day return to each pupil his papers for the week. Provide him with a mimeographed form similar to Figure 11 or 12, and a sheet of graph paper to be arranged as in Figure 10. Pupils should note on the error analysis sheet the errors they have made in each day's paper.

This analysis is done in the following manner: If the pupil has struck a **d** where he should have struck an **a**, he writes a **d** in the **a** column; if he has omitted the last letter of a word, say an **a**, he has made a space where he should have made an **a** and so writes space in the **a** column. The purpose of the "Error Analysis Chart" is to make evident any tendency to strike a certain key instead of the one intended. Wherever there is a tendency to make a certain type of error, the pupil should be required to write drills which will help him to overcome this tendency. This type of drill should take the form of writing several times, each word in which an error was made, each phrase in which it was made, and

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Mary Allen

S.R. Work.

get him get him right get him right in time get jim rifht get him rigjt
bet him he night judeg my fudge bet him hemmighht judge mu fudge bet him
he my fudge might be right my fudge might be right my fudge might be
right my tred in

Class Work.

be be br bet bdt bdt bed ded fed be be bet bet bed bde be be be bd bed beg
beg red red red fed fdd fed fed feg beg beg red red red fed fed fee f
fed fed get get get bag bag bag fee ged gee get gey ege bag bag bag

in in in inn inn inh in in in inn inn in n inn in in inn inn inn in in
him him jim hum hu m hym hym him him him hum hum him him him hum hum hum

mem me me by by by he he he me me me by by by he he he me me me by by by
he he he it it it if if if the the the jer jer he r it it it if if if the th
the the her her her met met ner met ner jer jet jet met met met net net
jet jet jet met met met cut cut cut try rry try try dry dry cut cut ctu

[illegible]

Individual Work

It might be (I) It might be right I might be (tight) I might be It might be 2
 right I judge it might be I judge it might be right I (judge) it might be I 1
 judge it I get it I get it right I might get it right I get it I get it
 right I might I bet he might be right I (get) he might be right I (beg) he 2
 might be right I bet it defer I get the fudge I defer I get the fudge I defer
 I get the fudge (I) He might get the fudge (H) might get the fudge He might 2
 get the fudge He might It might be It might be (right) I might be It might 1
 be right I (judge) it might be I judge it might be right I judge it might 1
 be I judge it I get it I get it right I might get it right I get I get it
 I get it right I might get

Errors

7 1/2 lines

.95 errors per line.

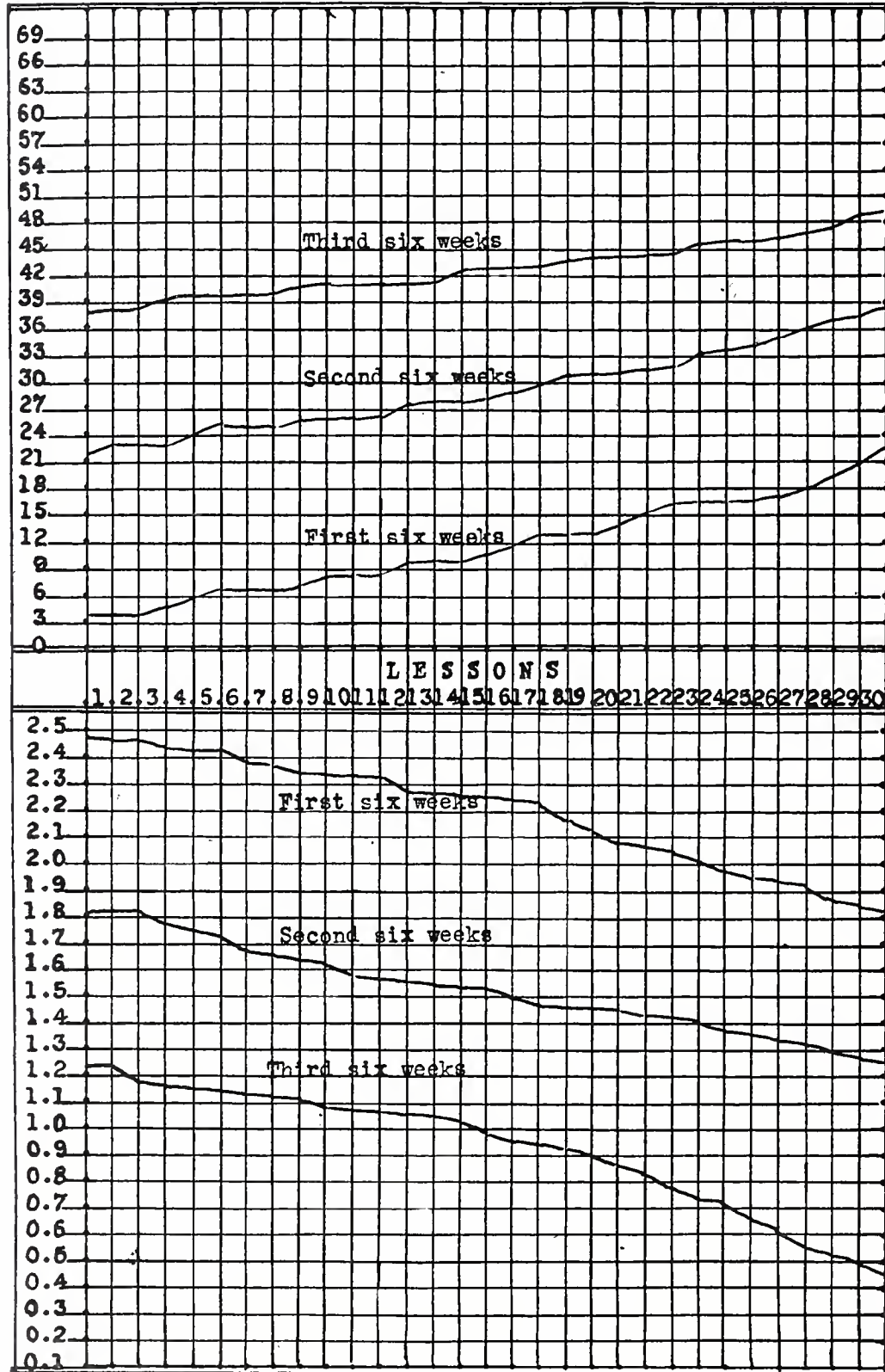
Figure 9—Arrangement of Pupil's Typewritten Paper

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each sentence in which it was made. Many textbooks also contain special types of drills and teachers may obtain free from L. C. Smith and Corona Typewriters, Inc., Syracuse, N. Y., a copy of "Corrective Drills."

On the practice-out day pupils who have no errors to practice out should be given special typing to do.

Number of lines typed in the individual work interval



Average number of errors made per line

Figure 10—Graphs to be Kept by Beginning Pupils in Typewriting

ERROR ANALYSIS CHART

Insert the date at the top of the column and write opposite any given letter or character, the letter or character which was incorrectly struck for it. Example: If a is incorrectly struck for s, write an a opposite s.

Pupil	Teacher					Section						
Dates												
A												
B												
C												
D												
E												
F												
G												
H												
I												
J												
K												
L												
M												
N												
O												
P												
Q												
R												
S												
T												
U												
V												
W												
X												
Y												
Z												
1												
2												
3												
4												
5												
6												
7												
8												
9												
0												
-												
"												
#												
\$												
%												
&												
'												
(
)												
3/4												
1/2												
1/4												
:												
;												
@												
¢												
,												
.												
/												
?												
TOTALS												

Figure 11—Illustration of the Error Analysis Chart

COURSE OF STUDY IN TYPEWRITING

[illegible]

Figure 12—Another Style of Error Analysis Chart

PLAN FOR LESSON FIVE

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson Five: Review the aims of Lessons Three and Four.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes only. Direct pupils to head papers and head each section of the paper in pencil. All of the work of the period is to be written on one sheet using both sides if necessary.)

It might be It might be he It might be due It might be It might be he
If it be, he might buy it If he be in, I might see him If it be, he might
He did it He did? Did he try? Did he try it? He did try it The men might
He did it He did? Did he try? Did he try it? He did try it The men might
The men might try it Yet he might try it Ten men might try it

(Conduct a one-minute finger gymnastic drill.)

2. Cleaning period: (Five minutes.)
Pass out brushes and cloths for the use of the pupils in dusting and cleaning their desks and machines. Teach them how to do this cleaning. (See par. 16, page 17.)
3. Class work: (Ten minutes. To be demonstrated by the teacher and written to her count. Before beginning the class work, pupils should write "class work" in pencil as a heading for this part of the paper.)

Left hand-

debt debt debt dred dred dred fret fret fret debt debt debt dred dred dred
feet feet feet tree tree tree free free free feet feet feet tree tree tree

LESSON PLANS FOR FIRST SEMESTER

Both hands—

then then then them them them they they they give give give gift gift gift
kind kind kind mind mind mind find find find fire fire fire high high high
here here here much much much very very very true true true been been been

(Conduct a one-minute finger gymnastic drill.)

4. Individual work: (Fifteen or more minutes.) (Before beginning this work, pupils should write "individual work" in pencil as a heading for this part of the paper.)

Meet me here Meet him here Meet me here Meet him here Meet me here Meet him here
Meet her here Meet them here Meet her here Meet them here Meet her here Meet them
Then meet me here Then meet him here Then meet me here Then meet him here
Then meet her here Then meet them here Then meet her here Then meet them here

5. Proof-reading: (See previous lesson plan.)
6. Check on cleanliness of room and passing of papers. Dismiss class.

PLAN FOR LESSON SIX

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson Six: Review the aims of Lessons Three, Four, and Five.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Direct pupils to head papers in pencil. All of the work of the period is to be written on one sheet using both sides if necessary.)

It might be the gift It might be her gift Did he give the gift? He did give the
gift It might be in my mind It might be in my mind to give the gift I might
find the gift I might find the gift in the fire Give them much Give them very
much Then he might give them much

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (One minute.) Carriage throw drill as directed in Lesson Four. (Ten minutes. Demonstrated by the teacher and written to her count. Before beginning the class work, pupils should write "class work" in pencil as a heading for this part of the paper.)

Given given given being being being check check check never never never
Think think think thing thing thing truce truce truce truth truth truth
There there there their their their three three three third third third

Bright bright bright fright fright fright better better better
Butter butter butter mutter mutter mutter cutter cutter cutter
Number number number kitchen kitchen kitchen certify certify certify

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Twenty or more minutes.) (Have pupils write "individual work" in pencil as a heading for this part of the paper.)

Meet the given debt They might meet the given debt They might find it right
They might find it bright They might find it better They might find the butter
They might find the butter in the kitchen They might find the number of the
gift They might find it high in the fire Did the cutter mutter? Did the cutter
mutter butter? Did he certify the number? Did he certify a better number? Did
he give them their number? Did the fire give them a fright? Did it give him
a fright?

4. Proof-read as explained in Lesson Plan Four.
5. Check on the passage of papers; the cleanliness of the room; the covering of the machines; dismiss.

LESSON PLANS FOR FIRST SEMESTER

Both hands drill:

it it it is is is do do do go go go of of of or or or
so so so to to to us us us its its its off off off
old old old one one one how how how now now now our our our
out out out she she she sir sir sir too too too two two two
yet yet yet use use use sun sun sun sum sum sum why why why
who who who for for for got got got his his his let let let
new new new not not not

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Fifteen or more minutes.) (Pupils should write "individual work" in pencil as a heading for this part of the paper.)

EXERCISE 1

Do go. Do it. Go in. I go. I do. We go. Do go on. Go to it.
It is up. It is he. It is I. It is in. I do so. I do it. I do go.
No, we go. We do go. We go in. We go on. We do it. So be it. Do go
on in. Do we go? No, I am on. So we do go. It is up to us. It is to
go to me. If I go, be up by me. No, he is to go by me.

EXERCISE 2

You try. It is fun. Did ye try? Yes. Let him try too. Then let
her try. Now you try. Did you try? Why not try? Let the boy try.
You let him try. The men might try. Why not try now? Now, you may
try. Did he try to do it, too? It is he who did it. Why did she
not try?

EXERCISE 3

Ask for the job now. Did she try to get it? Can you try to get it?
Ask him how he got it. Do not put off the use of it. Can you
buy two for me? (Retype if time permits.)

4. Proof-read as explained in Lesson Plan Four.
5. Check on the cleanliness of the room; covering of machines; passing of papers; and dismiss the class.

PLAN FOR LESSON EIGHT

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To review the aims of Lesson Seven.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes only. Direct pupils to head papers in pencil. All of the work of the period is to be written on one sheet, using both sides if necessary. Do not give anyone an extra paper.)

Let the big boy try now. Yes, she did try to do it. They did try too.
Did they try? Did he go to them? Did he get them to try? You might try.

I beg you not to buy the box. Did you buy the new box? Did you go to
see the new box? We might try to get the new box. The new box is best.

Did she try to run it? Yes, she did try to run it. I did look for you
to run it. Why did you not run it? Let me run it. Let me try to run it.

Did she buy the old one or the new one? Yes, she did buy the new one.
I might buy the new one, too. Let me get a big one. I can run the big one.

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes. Review briefly the carriage throw drill described in Lesson Seven. The following is to be demonstrated by the teacher and written to her count. Before beginning it, pupils should write "class work" in pencil as a heading for this part of the paper.)

lo9ol sw2ws lo9ol sw2ws lo9ol sw2ws l.1 sxs l.1 sxs l.1 sxs lklklksdsdsds
ing ing ing ed ed ed able able able ible ible ible ness ness ness ic ic ic
bill bill bill will will will till till till fill fill fill want want want
tell tell tell fell fell fell sell sell sell well well well what what what
full full full dull dull dull girl girl girl gulf gulf gulf silk silk silk
list list list mist mist mist must must must most most most more more more
good good good look look look foot foot foot book book book soon soon soon

COURSE OF STUDY IN TYPEWRITING

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Twenty or more minutes. Direct pupils to head this section in pencil.)

EXERCISE 1

It is fun. Keep busy. Come in. Come in soon. Come in today. The girl will meet you. She will meet you here. She will meet you here this week.

EXERCISE 2

Meet me here before you go. Meet me here in my room. Meet me here in this room. Meet me here in this room now. When do they think they will meet here in this room? I might like to meet them here in this room.

EXERCISE 3

It is just coming in. They were just coming in. Is he just coming in? Is just he coming in? Is the girl coming too? They like you to come too.

EXERCISE 4

The girl was glad to go home. We like your home. They like your home too. They will be here to get your work. They will be here to get the work you did in your home.

EXERCISE 5

How long will they keep the book? They will keep it next week, too.

4. Proof-read as explained in Lesson Plan Four.
5. Check on the cleanliness of the room; covering of machines; passing papers; and dismiss the class.

PLAN FOR LESSON NINE

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To review the aims of Lesson Seven.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Direct pupils to head papers. All of the work of the period is to be written on one sheet, using both sides if necessary. Do not give anyone an extra paper.)

It was cold in the city. We were cold in the city. Were you cold in the city? How long will it be cold? Will it be cold this week?

Your bill will be here this week. Will it be cold this week? When did you get this bill? Let me have their bill. I must get their bill soon. When did you get their bill?

Were you busy when he got in? He got in when you were busy. If you are busy, they will help you to look over their list. Will they help us to look over this list? Must we go over this list with you?

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes. Review briefly the carriage throw drill described in Lesson Seven. The following is to be demonstrated by the teacher and written to her count. Before beginning it, pupils should write "class work" as a heading.)

some some some come come come home home home know know know room room room
four four four your your your work work work once once once over over over
when when when send send send sent sent sent went went went down down down
feel feel feel this this this from from from week week week just just just
wish wish wish long long long with with with next next next shoe shoe shoe
note note note like like like sure sure sure like like like sure sure sure

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Twenty or more minutes. Direct pupils to head this section.)

LESSON PLANS FOR FIRST SEMESTER

EXERCISE 1

Will some come home? Will some come home soon? When will some of them come home? Will some of them come home in time? I would like some of them to come home with me. I hope some of them will come home soon.

EXERCISE 2

I know four of them. Four of them work in my room. I went to work with four of them. When I went down to work, I went just like this. I note how much you like four of them.

EXERCISE 3

How long do you wish four of them? Do you feel sure you will use four of them? He went down just like this. We sent it down with the shoe. This shoe went down with the rest of them.

4. Proof-read as explained in Lesson Plan Four.
5. Check on the cleanliness of the room; covering of the machines; passing of papers; and dismiss.

PLAN FOR LESSON TEN

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To review the aims of Lesson Seven.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Direct pupils to head papers in pencil. All work is to be done on one paper.)

I get a check every week. When do you get a check? Bring your check to me. We should write for the check soon. I should check the books next week. I will check the books next week. I will be too busy to check the books next week.

Tell me when the goods get here. I would like to see the goods when they come in. Don't you think the goods will be here? Don't you think they will be here in time? I don't know how busy they will be. I look for the goods next week.

(Conduct a one-minute finger gymnastic drill.)

2. Clean typewriters as suggested in Lesson Five (five minutes).
3. Class work: (Ten minutes. Review briefly the carriage throw drill described in Lesson Seven. The following is to be demonstrated by the teacher and written to her count. Instruct pupils to head this section.)

five five five gone gone gone into into into keep keep keep knew knew knew
left left left less less less life life life line line line need need need
nice nice nice open open open rest rest rest seem seem seem show show show
such such such time time time told told told took took took town town town
upon upon upon used used used been been been busy busy busy your your your

(Conduct a one-minute finger gymnastic drill.)

4. Individual work. (Twenty or more minutes. Direct pupils to head this section.)

EXERCISE 1

I should get five. I don't get five. He went to get five. You should keep five. I knew you should keep five. We will keep five. He ought to keep not less. You should keep the rest, but he ought to keep five.

EXERCISE 2

Did you keep the time? It ought to be a nice time. The rest will do you good. You will be used to it then. It will come upon us in time. How much time is left? Will you go in time? He told me it took much time. Will it open in time? The town is in such need, we will send them this line.

COURSE OF STUDY IN TYPEWRITING

EXERCISE 3

I knew it in time. I found it in time to go to the town. I will be busy, but I will look into his life. He will rest in the town. I used to rest in his room in the town. You seem to show less life in town. Do you not like it in town? He is gone, but I know he will keep busy. Do you need a new line? I knew you did.

5. Proof-read as explained in Lesson Plan Four.
6. Check condition of room, covering machines, passing papers, dismiss.

PLAN FOR LESSON ELEVEN

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To review the aims of Lesson Seven.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Direct pupils to head papers in pencil. All of the work of the period is to be written on one sheet, using both sides if necessary. Do not give anyone an extra paper.)

both both both busy busy busy city city city copy copy copy cost cost cost
does does does done done done dont dont dont even even even fine fine fine

They will be busy. They will be busy in the city. They will be too busy in the city to copy this. Does he know the cost of it? Does he know the cost of this copy? Does he know the cost of a copy in the city? Even if he does know, should I give it to him? Dont you know him? It is done. Dont you know it is done? They are both done.

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes. Review briefly the carriage throw drill described in Lesson Seven. The following is to be demonstrated by the teacher and written to her count. Before beginning it, pupils should write "class work" in pencil as a heading for this part of the paper.)

clock clock clock crust crust crust guest guest guest first first first
drill drill drill drive drive drive every every every going going going
flour flour flour house house house other other other order order order
since since since these these these throw throw throw threw threw threw
times times times until until until which which which would would would
write write write other other other every every every yours yours yours

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Twenty or more minutes. Pupils should write "individual work" in pencil as a heading for this part of the paper.)

EXERCISE 1

You will meet four boys from your city with news from home. Do you not feel like coming home? We wish you would come home soon.

EXERCISE 2

Once upon a time a very fine girl took up her book. She did not try to do her best. She did not think this work would help her. Now she knows it will help her and she will come to us soon to do her work right.

EXERCISE 3

I will be in the first drill. Will it be in the first drill? I should be in the first drill three times. Since these are in the first drill, you should write every other word in your drill.

EXERCISE 4

I order flour at the other house. How often do you order flour? We threw out the flour which we got first. Will you drive over for flour every week? He is going to drive over every week, too.

4. Proof-read as explained in Lesson Plan Four.
5. Check on the cleanliness of the room; covering of machines; passing of papers; and dismiss the class.

LESSON PLANS FOR FIRST SEMESTER

PLAN FOR LESSON TWELVE

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: Review the aims of Lesson Seven.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Direct pupils to head papers in pencil. All of the work of the period is to be written on one sheet, using both sides if necessary. Do not give anyone an extra sheet.)

Be sure to come in before four o'clock. He will be our guest and will be here first. He will drive over after going by your house. Be sure to bring our order of flour. Since these were sent to us, we threw those out.

Write this drill every other week. Write the other drill this week. I will write this drill, but he will write yours. Which drill would you like me to write? Write this drill until you know which word should come first.

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes. Review briefly the carriage throw drill. Demonstrate the following exercise and have pupils write with you to music or other rhythm. Pupils should head this exercise in pencil on their papers.)

coming coming coming credit credit credit desire desire desire
dinner dinner dinner during during during either either either
except except except fellow fellow fellow friend friend friend
future future future giving giving giving indeed indeed indeed
kindly kindly kindly months months months mother mother mother
myself myself myself office office office orders orders orders
people people people pretty pretty pretty prices prices prices
prompt prompt prompt recent recent recent record record record
regret regret regret report report report summer summer summer
supply supply supply things things things winter winter winter

3. Individual work: (Twenty minutes. Have pupils head this section.)

EXERCISE 1

You will see the office. You will see my office. You will get the orders in my office. We will receive prompt orders for the winter. You will report to my office for the summer. They will supply my office during the summer. I will record your orders and give you the credit you need.

EXERCISE 2

In future kindly give your orders to my friend. I will expect you to give your orders to my friend. My friend will kindly give you the orders for this office. We regret your desire to give your orders to your friend in future. Your record in recent months is pretty good. We would like the orders to keep on coming to our office.

4. Proof-read as explained in Lesson Plan Four.
5. Check on the cleanliness of the room; covering of machines; passing of papers; and dismiss.

PLAN FOR LESSON THIRTEEN

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To review the aims of Lesson Seven.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Direct pupils to head papers in pencil. All of the work of the period is to be written on one sheet, using both sides if necessary. Do not give anyone an extra paper. Rewrite if time permits.)

COURSE OF STUDY IN TYPEWRITING

Sir

Did you get a box from home? Did they send you the new book in it? If you did get the book, is it the kind you liked?

Write to your boy soon. He would like to know how you like the book.

Some time next week you will get a check from your girl. She will soon get your money from the trust fund. Come down with me next week to see the old home.

Yours truly,

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes. To be demonstrated by the teacher and written to her count. Before beginning the class work, pupils should write the heading "class work.")

Between between between country country country evening evening evening
Thought thought thought through through through believe believe believe
Enclose enclose enclose however however however express express express
Morning morning morning receive receive receive service service service
Furnish furnish furnish further further further getting getting getting
Invoice invoice invoice letters letters letters looking looking looking
Meeting meeting meeting nothing nothing nothing ordered ordered ordered
Present present present receipt receipt receipt request request request
Sending sending sending shipped shipped shipped subject subject subject
Support support support trouble trouble trouble whether whether whether
Without without without writing writing writing written written written
Continue continue continue conclude conclude conclude business business
Enclosed enclosed enclosed gentlemen gentlemen gentlemen received received

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Fifteen or more minutes. Direct pupils to write the heading "individual work.")

EXERCISE 1

Her mother would like her to come home. When does school close? I expect her to go home on Friday. Will she be free to go then?

EXERCISE 2

What price will you get for your house? I would like to come out for dinner tonight. Could you tell me then? Will other friends be with you tonight? Would you like me to come on some other night? If you write or send me word before six, I will come out when you think best.

EXERCISE 3

Will you write to the club before next week? We desire to know if you will supply us with the goods we need next winter. I will not get them from others if I know you will supply them.

EXERCISE 4

The records you furnish give me just the items I need. The whole world lies before me now in the best form for use.

4. Proof-read as explained in Lesson Plan Four.
5. Check on the cleanliness of the room; covering of machines; passing of papers; and dismiss the class.

PLAN FOR LESSON FOURTEEN

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To review the aims of previous lessons; to teach the ;p0p;/ and aqaza locations and reaches. See Figure 14.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Head the paper in pencil. Direct each pupil to write two lines of his or her name. Tell them to type their names on papers in future.)



Figure 14—Fifth Key Group Taught

Gentlemen:

By the end of the next week I will be with you in your office. I should be there by eight o'clock in the morning and I hope we might begin to go over the bills promptly. I do not know now just the night I expect to get to your city, but I count on being there by the end of the week.

Let me know when your friends would like to go out to the summer house. If you will send me a letter, I will order my men to keep the summer house open.

Do you think I must be in the city more than two nights? If so, I will write to Mrs. Kind. She will expect me to be home over the week end.

Yours truly,

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Two minutes. Direct pupils to head "class work" section in pencil. Set the margin stop for the lefthand side of the scale at 20; set a tabular stop at each of the following points: 30, 40, 50, 60. Direct pupils to set the carriage at 20 and to write "the"; to press the tabular key and write "they"; to press the tabular key and write "then"; to press the tabular key and write "them"; to press the tabular key and write "for"; and finally to throw the carriage. Have this line repeated ten times. (Twelve minutes—writing to teacher's count.)

;p; aqa ;p; aqa ;p0p; aqaqa ;p0p; aqaqa ;p0p; aqaqa ;p0p; aqaqa
 ;/; aza ;/; aza ;/; aza ;p0p;/; aqaqaza ;p0p;/; aqaqaza ;p0p;/; aqaqaza
 fdsaqa jkl;p; fdsaqa jkl;p; fdsaqa jkl;p; aswqa ;lop; aswqa ;lop; aswqa ;lop;
 fdsaza jkl;/; fdsaza jkl;/; fdsaza jkl;/; asxza ;l./; asxza l./; asxza ;l./;

Left hand—

as as as at at at are are are bad bad bad
 car car car saw saw saw war war war was was was care care care
 card card card case case case cast cast cast date date date
 dear dear dear as as as at at at are are are was was was

Right hand—

up up up pop pop pop ill ill ill lip lip lip
 kill kill kill hill hill hill mill mill mill pill pill pill
 poll poll poll holly holly holly up up up pop pop pop ill ill ill

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Fifteen or more minutes. Head the section in pencil.)

COURSE OF STUDY IN TYPEWRITING

EXERCISE 1

I am. I am in. I am here. Am I in? Am I in here? I am in it. Am I in it? Am I on? He is on. No, I am on. As I am on, I go. As I am here, I stay. Take me as I am. If I am in, he must take me.

EXERCISE 2

Ask him. Ask him now. Ask him here. Ask him to come here. Ask her, too. Ask her and ask him. Ask them. Ask them now. You ask them. You ask them now. He can go. He can go if you ask him. If you ask the man, he can go. Ask for two. Ask if two can go. If two can go, the man and the girl may go.

EXERCISE 3

Can you pay? Can he pay? Can he pay now? Can he pay two? Try to pay. Try to pay today. She may pay. She may get her pay. May she get her pay? May she get her pay today? May I get my pay? May he get his pay? May he and I get our pay?

EXERCISE 4

May I try? May he try? May she try? He may try. She may try. All may try. Am I to try? But you may try. He may try, but you may not try.

4. Proof-read as explained in Lesson Plan Four.
5. Check-up for dismissal.

PLAN FOR LESSON FIFTEEN

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To review the aims of Lesson Fourteen.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Direct pupils to type their names on papers in future.)

The show came from your city. It is a good show. Did the show open in your city? How did you like the show? We like the show very much. The show has been here four weeks. They say it will be here a long time yet.

He has been here for a copy of the book. Should I give him your copy of the book? Your copy of the book has been here a long time. We think that it should be used more than it is. When will you let me know about your book?

You will meet four boys from your city at my home. Come to my home as soon as you can. These boys want to see you. They knew your father. They want to talk to you about your city and how much they like it. Come to our home before six.

(Conduct a one-minute finger gymnastic drill.)

2. Clean typewriters as suggested in Lesson Five (five minutes).
3. Class work: (Ten minutes. Demonstrate the following and require the class to type with you, either to your count or to music.)

am am am an an an and and and any any any all all all ago ago ago are are are
ask ask ask bad bad bad can can can car car car far far far cut cut cut
day day day may may may pay pay pay say say say way way way had had had
has has has man man man able able able also also also away away away
back back back bank bank bank call call call came came came care care care
cant cant cant card card card case case case date date date days days days
dear dear dear each each each fact fact fact gave gave gave glad glad glad

(Conduct a one-minute finger gymnastic drill.)

4. Individual work: (Fifteen or more minutes. Write each paragraph twice, then the entire letter. Repeat the letter if time permits.)

LESSON PLANS FOR FIRST SEMESTER

Dear Sir:

In your letter of Monday you said that I might have only a part of the copy now. From your card of last week I had hoped that I might have all of it. Since I have planned to use all of it, I do not see why I may not have the complete copy.

Did you know that James had the copy in his home for a week? I was told that he did have it that long and I feel sure that you know he had it also. Of course, since he has had it so long, he has had time to make all the copies of the plans he wants.

May I hear from you soon? If I am to bid on this work, I must have time to look up prices and pick up some good men. I was led to believe that you wanted me to have this work and not James, but he can now bid on it with more information than I have.

Yours truly,

5. Proof-read as explained in Lesson Plan Four.
6. Check on cleanliness, covering machines, passing of papers, dismiss.

PLAN FOR LESSON SIXTEEN

A. Pre-Lesson Procedure by Teacher.

Aim of lesson: To perfect the aim of Lesson Fourteen.

B. Lesson Procedure by Teacher and Pupils. Direct pupils to write two lines of "self-reliance work" all in capitals.

1. Self-reliance work: (Ten minutes.)

I have a car. I have a new car. Ask for my car. Ask to see my car. Ask to see my car now. I must pay for my car. I can pay for my car. I can pay for my car now. I like my new car very much.

You and I are too old. I am too old. I know I am too old. I am too old to run the car. Am I too old to run the car? Am I too young to run the car? I run the car with care. The car cost so much that I must take care of it. All who own cars should take care of their cars.

Has the man all of it? Has he any of it? Has he some of it? As far as I could see, he had much of it. Could you see that he had much of it? How much of it could you see that he had? Has he had his hand all cut off? Can you see how much of his hand has been cut off? I hope that he has not had any of his hand cut off.

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes. Review the carriage throw drill which was described in Lesson Eleven. Then have pupils write to your count.)

Hand hand hand hard hard hard have have have hear hear hear help help help
Last last last made made made mail mail mail make make make many many many
Name name name near near near open open open paid paid paid part part part
Past past past play play play read read read real real real said said said
Sale sale sale same same same stay stay stay take take take talk talk talk
Than than than that that that what what what year year year hand hand hand

(Repeat if time permits.)

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Twenty or more minutes.)

EXERCISE 1

Come back. Come back soon. Come back today. Come back to me.
When will you come back? How soon will you come back? How long
before you will be back? I hope you will be back before noon.

EXERCISE 2

Take care. Take time. Take enough time. Take care in time.
Take care of the car. Take more care. Take more care of the car.
Take more care of my car. You must take more care of my car.

COURSE OF STUDY IN TYPEWRITING

EXERCISE 3

Take your time. Take enough time. Have you the time? How much time have you? Am I on time? Have I time enough to take my time? Take some time. Take time to come in. I am able to take a little time.

EXERCISE 4

Call when you can. All call today. Can you all call soon? When can all of you call again? Can you call at the bank? Meet me at the bank if you have time. It has just come in by mail.

EXERCISE 5

I saw that show in the city. Have you seen that show? When can you go to see the show? It is in the city now. Can you go to see the show tonight? Can you go to see the show with May and me?

4. Proof-read as explained in Lesson Plan Four.

5. Check-up for dismissal.

PLAN FOR LESSON SEVENTEEN

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To perfect the aims of Lesson Fourteen.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Direct pupils to type their names and headings in future. Direct pupils to write two lines of "class work" in capitals.)

Dear Sir:

We had hoped to hear from you before this. May I ask why you have not paid your bill? Is it not a fact that you have a good job? We know that you work all the time. Is it fair to make us wait so long for you to pay this bill?

The sale we made to you was on May 4. We wrote to you on June 5. You have not paid any heed to our letter. You must know that we must have each bill paid on time. If our bills are not paid on time, we lose money. This bill was due a long time ago. Will you pay the bill today? We shall look for your check.

Yours truly,

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes. Review the carriage throw drill described in Lesson Eleven, but substitute other common words for the ones given in the directions. Then write to the teacher's count.)

About about about above above above after after after again again again
Along along along asked asked asked class class class delay delay delay
Early early early favor favor favor great great great happy happy happy
Heard heard heard large large large later later later least least least
Leave leave leave paper paper paper party party party place place place
Ready ready ready shall shall shall small small small state state state
Taken taken taken thank thank thank today today today value value value
Waste waste waste years years years about about about above above above

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Twenty or more minutes.)

EXERCISE 1

The world is large. The world is small. Do not delay too long. The other fellow might beat you to it. Be awake. Do you know how large the world is? Do you know how really small the world is?

LESSON PLANS FOR FIRST SEMESTER

EXERCISE 2

I have money in the bank. I have money in the bank. Do you have money in the bank? All of us should have some money in the bank. Put some money in the bank soon. The bank is a good place to keep money. All of us should have some money.

EXERCISE 3

We shall check the books again. When we have checked the books again we shall write to you. Will you write to us if there is anything about the books that you want us to check? We like to check your books and we can check them right.

EXERCISE 4

The value of the stock was small. How small was the value of the stock? Was the value of the stock too small? Place your order for more stock today. I am sorry that you had to call me about the stock so often. The state of the stock market is bad, but I can buy the stock you want.

4. Proof-read as explained in Lesson Plan Four.
5. Check-up for dismissal.

PLAN FOR LESSON EIGHTEEN

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To perfect the aims of Lesson Fourteen.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Type all headings.)

Dear Mr. Weeks:

I have the book about which Mr. Young wrote and which he would like to read. May I send a copy of it to you today? Could you read it this week? I get up at five in the morning to read. I find that I can read better and more quickly then.

It is true that the price of the book is quite high. At first you may think it is too high for such a book, but it is a great book and one that everyone should read. It is also a book that everyone should have on his table all the time. You will want to look up things in it often.

After you have read every part of it I think you will order some more copies for your men. If you do not have the money to buy the books now, you can order them and pay us next month. Be sure to send the book we sent you.

Very truly yours,

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes.)

Advice advice advice advise advise advise accept accept accept almost almost
Always always always amount amount amount answer answer answer around around
Called called called change change change charge charge charge Friday Friday
Having having having making making making matter matter matter Monday Monday
Please please please rather rather rather really really really reason reason
Regard regard regard remain remain remain Sunday Sunday Sunday taking taking
Unable unable unable wanted wanted wanted advice advice advice advise advise

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Twenty or more minutes.)

EXERCISE 1

Her mother called her. Did her mother call her? When did her mother call her? When will her mother call her? Will her mother call her soon? Why does her mother call her? Did his mother call him? How often did his mother call him? His mother called him more often than my mother called me.

COURSE OF STUDY IN TYPEWRITING

EXERCISE 2

I heard from father today. Have you heard from your father yet? When do you expect to hear from your father? Will your father write to you soon? Will your father take you to the show? My father will take us to the show. You can go with father and me to the show. I know you will like father.

EXERCISE 3

He is taking the winter course. Are you remaining to take the winter course? I think the winter course will be better than the fall course. I have been told that the winter course is the best. Many of the group stay on for the winter course. There are two ways of spelling course--course and coarse. Of course, you knew that.

EXERCISE 4

He was taking stock when I called. How often should he take stock? Do you take any stock in what he says? Will you answer my letter about him soon? Will you answer my letter early next week? I want to know about the stock before I buy it. Can you give me a report on the stock this week?

4. Proof-read as explained in Lesson Plan Four.
5. Check-up for dismissal.

PLAN FOR LESSON NINETEEN

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To perfect the aims of Lesson Fourteen.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Recopy if time permits.)

Dear Mr. Little:

During the winter months, most of the prices on our goods will remain the same, though we may write to you about some changes in the near future.

I regret that I cannot give you a good supply of every kind of goods we list. Should you have a special need for our stock, please send me your orders within the next few weeks. We have been unable to accept orders for next week, as our recent sales have been quite large.

We send bills on the first of the month after the orders have been sent to you, and also check all goods with care before they are sent out.

We are glad to have your orders and will take care to please you in every way.

Yours very truly,

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes.)

Account account account address address address against against against
Already already already another another another balance balance balance
Because because because company company company forward forward forward
General general general January January January payment payment payment
Perhaps perhaps perhaps pleased pleased pleased several several several
Special special special weather weather weather allowed allowed allowed

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Fifteen or more minutes.)

EXERCISE 1

The statement is wrong. At least I do not understand it. Do you have any information about it? Did you think the report was satisfactory? If the statement is not wrong, I owe the company some money and of course I will pay it. I will return the money I owe in my remittance for next month.

LESSON PLANS FOR FIRST SEMESTER

EXERCISE 2

The information I received from you was not used. I asked for it because it is necessary for me to make use of every opportunity I have to learn the facts. Even though I did not use the information, I should pay for it. Please thank Miss Chance for collecting it. Her work was most satisfactory.

EXERCISE 3

There must be something wrong. Perhaps you know what it is. I did not have an opportunity to talk with you yesterday. For that reason I could not make them a satisfactory reply. Perhaps it is not necessary for me to write to them now. I should, however, like to know what information you gave them.

4. Proof-read as explained in Lesson Plan Four.
5. Check-up for dismissal.

PLAN FOR LESSON TWENTY

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To perfect the aims of Lesson Fourteen.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes.)

FRIDAY

Friday is the last day of the week in school. We rest and play at the end of the week. We have time to read good books and go to plays. We can not go to plays or read on any night except Friday, for we have too much work to do. Really, Friday is a glad day for all of us. It is rather hard to come back to school or work on Monday. We must do our best all week, so that we can play during the week end.

(Conduct a one-minute finger gymnastic drill.)

2. Have the machines and desk cleaned. (Five minutes.)
3. Class work: (Ten minutes.)

Anything anything anything contract contract contract material material
Pleasure pleasure pleasure probably probably probably Saturday Saturday
Thanking thanking thanking afternoon afternoon afternoon attention attention
Attention certainly certainly certainly necessary necessary necessary
Regarding regarding regarding statement statement statement yesterday
Yesterday yesterday remittance remittance remittance appreciate appreciate
Appreciate understand understand understand department department
Department information information information satisfactory satisfactory
Satisfactory anything anything anything

(Conduct a one-minute finger gymnastic drill.)

4. Individual work: (Fifteen or more minutes. Repeat if time permits.)

SCHOOL

School should be like an office. You get paid for good work. There is a time for play and for rest, but most of the time is given to work. We want good work. You are not doing the right thing unless you do good work everyday. If you do good work everyday, you will be glad. Good work has its own price. You will be paid your price, and it will not be a small price. In the office you get money; in the school you get marks. In both places you are happy if your work is well done. Dont wait until your chance to go to school has passed and then be sorry for what you have made of it.

5. Proof-read as explained in Lesson Plan Four.
6. Check-up for dismissal.

COURSE OF STUDY IN TYPEWRITING

PLAN FOR LESSON TWENTY-ONE

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To make the locations and reaches which are necessary in writing numbers and special characters automatic.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Recopy if time permits.)

Dear Sir:

Yesterday afternoon my attention was called to our last statement. Of course, it will be necessary for us to do something at once about the wrong balance. In connection with it, I am returning some other information which may be of general value. Please keep a close check on each department for the next month. Also, are you following each report as it comes in? You should check up daily everything which is reported on that day.

We will certainly do all we can to help you and we hope that our work will be satisfactory.

Yours truly,

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Fifteen minutes. The typing of this work should be controlled. In other words, typed to the teacher's count.)

ju7uj fr4rf ju7uj fr4rf ju7uj fr4rf j7j f4f j7j f4f j7j f4f u7u r4r u7u r4r
ki8ik de3ed ki8ik de3ed ki8ik de3ed k8k d3d k8k d3d k8k d3d i8i e3e i8i e3e
lo9ol sw2ws lo9ol sw2ws lo9ol sw2ws l9l s2s l9l s2s l9l s2s o9o w2w o9o w2w
;p0p; aqaga ;p0p; aqaga ;p0p; aqaga ;0; aqa ;0; aqa ;0; aqa p0p aqa p0p aqa
n6n b5b n6n b5b n6n b5b m7m v4v m7m v4v m7m v4v ,8, c3c ,8, c3c ,8, c3c
.9. x2x .9. x2x .9. x2x
123456789 - 1234567890- 1234567890- 123456789 - 1234567890- 1234567890-
1203948576- 1203948576- 1203948576- 1203948576- 1203948576- 1203948576-
7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4
5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6
8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3 8 3
9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2 9 2
1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0
29
28 28

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Fifteen or more minutes. Recopy if time permits.)

EXERCISE 1

a l a c s t r o n t , n e t a l p s r e g n i g f r e p a p s y e k e s a
e l e r - e g a i r s r a c r a b e c a p s e g a u g e e c a p s e l n i
s p t o p l a n i g r a m s b o n k r e d n i l y c . , k e y e s a e l e r
r e 3 f 4 j 7 h 6 j 7 k 8 i 8 o 9 o l o 9 ; p i 8 d 3 e d 3 4 r f 4 f g t 5
e d i u g 9 r e 3 p 0 l c a p s 6 7 u 6 j 7 m k 8 i 8 i , k 8 s 3 d f h u 7

EXERCISE 2

I have 123 boxes to send to 479 Market Street. Do you think your boy could take them there before 5 today? These 123 boxes are part of the 5680 boxes which you ordered us to make for you.

EXERCISE 3

Are you in favor of the number 48? I was talking with the foreman of number 21 shop and he thinks that 56 is the best number. When I asked the other men in the shop, some of them favored 37 and some thought 90 was best.

LESSON PLANS FOR FIRST SEMESTER

EXERCISE 4

On page 457, paragraph 6, you will find the reference which was noted by Jim in his letter of October 28, 1930. On pages 298, 346, and 157 are similar notes. Did you have your secretary copy the 15 lines from page 627 and the 34 lines from page 589?

4. Proof-read as explained in Lesson Plan Four.
5. Check-up for dismissal.

PLAN FOR LESSON TWENTY-TWO

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To make the locations and reaches which are necessary in writing numbers and special characters automatic.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Recopy if time permits.)

Dear Sir:

Your note said that I might have 75 pages of the copy by this morning and you have sent me only 60 pages. The entire 149 pages were to be in my hands by Friday, April 23. As you know, I have promised to have 8 pages of the entire work in the hands of the committee before May 10. When will you be able to send me the remainder of the work? Could you let me have 25 pages tomorrow? That would leave you 64 pages to finish in 3 weeks. Do not forget that page 89 is to be reserved for a picture.

Please let me know promptly what I may expect.

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes. The typing of this work should be controlled by the teacher's count.)

#23 #34 #45 #23 #34 #45 #23 #34 #45 #25 #24 #23 #25 #24 #23 #26 #25 #24 #23
#89 #79 #69 #89 #79 #69 #89 #79 #69 #89 #79 #69 #89 #79 #69 #50 #50 #50 #50
\$20 \$30 \$40 \$20 \$30 \$40 \$20 \$30 \$40 \$50 \$60 \$70 \$50 \$60 \$70 \$50 \$60 \$70 \$80
90# 89# 79# 69# 90# 89# 79# 69# 98# 97# 96# 98# 97# 96# 89# 78# 67# 89# 79#
58% 69% 40% 58% 69% 40% 58% 69% 40% 58% 69% 40% 58% 69% 40% 58% 69% 40% 58%
Thomas Smith & Company, Thomas Smith & Company, Thomas Smith & Company,
5% on #23, 5% on #23, 6% on #89, 4% on #9089, 3% is all you can get on #72

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Twenty or more minutes. Recopy if time permits.)

EXERCISE 1

Dear Sir:

We could not find the receipt even though we looked through all the letters. But we did find the address you asked for. It is: 569 West 124th Street and the firm had moved its offices from 378 East 100th Street on the 28th of April, 1930. I wish you would call upon the manager of this concern. As you know he had promised us 6% on the #45, and we have not been paid anything like this amount.

Yours truly,

EXERCISE 2

Dear Mr. Getting:

Upon looking up the copy of your January 28 invoice, at your request, we find that a balance of \$139.45 is still upon our books. Perhaps there is some good reason for not meeting this invoice when it became due. If there is, please inform us when we may expect payment.

There is no invoice upon our books dated January 6 or 7.

With these facts before you, we hope you will make prompt payment.

Yours truly,

4. Proof-read as explained in Lesson Plan Four.
5. Check-up for dismissal.

¹The sign is used after figures to represent pounds.

LESSON PLANS FOR FIRST SEMESTER

PLAN FOR LESSON TWENTY-FOUR

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To make the locations and reaches which are necessary in writing numbers and special characters automatic.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Recopy if time permits.)

Dear William:

George says: "I met Henry yesterday and he told me all about the trouble between the office and the mill. To put the matter in his words: 'They (the mill workers) sent me a letter by today's mail in which they demand an increase of 10 cents an hour.' Such an increase would amount to 80 cents a day or \$4.50 a week for each man. As you know, we work five hours on Saturday. Since we employ eight men, our payroll will thus be increased \$35.20 a week. We have been working on a 9% margin for sometime. If we grant this request, our margin will be reduced to less than 6%! Explain to the men that our operating net is quite low; that we have an offer of \$70,000 for our property from people who wish to erect an apartment house on the ground, and that it would pay us better to accept this offer than to continue in business on a basis which this increase would make necessary."

Please call the men together this evening and deliver this message to them. Upon them should rest the decision.

Very truly yours,

(Conduct a one-minute finger gymnastic drill.)

2. Class work: (Ten minutes. Recopy if time permits.)

\$5 is 8-13% of \$60. $12\frac{1}{2}$ is $\frac{1}{8}$ of 100. $\frac{1}{2} \times \frac{1}{2}$ equals $\frac{1}{4}$. #497 is $\frac{1}{2}$ as large as #865. Use the ampersand only in firm names when the firm uses the ampersand on its letterhead. For example: Marshall Smith & Co. The Boys' Club. The Parents' Association. 11:45 P. M. $\frac{1}{4} \div \frac{1}{2}$ equals $\frac{1}{2}$. $\frac{1}{2} \div \frac{1}{4}$ equals 2. 2# @ 3¢ a pound is 6¢. 234# @ 4¢ a pound is \$936. 1000# @ $\frac{3}{4}$ ¢ a pound is \$7.50.

(Conduct a one-minute finger gymnastic drill.)

3. Individual work: (Twenty or more minutes. Recopy if time permits.)

EXERCISE 1

Dear Sir:

I have your order for 3890# of our compound @ $2\frac{1}{4}$ ¢ a pound, and your check for \$87.53. We think that you must have read the quotation in our catalogue incorrectly. The price should have been $2\frac{3}{4}$ ¢ a pound. This price makes a difference of \$19.44 which is not covered by your check.

In order that you may not be inconvenienced, we have shipped the goods and ask you to send us your check for \$19.44 by return mail.

Very truly yours,

EXERCISE 2

Dear Sir:

We wrote to you on December 16 as follows: "Your invoice for \$95.63 is overdue. May we have your check in payment of this bill in the next mail?" We have not received a reply to this letter. Why have you failed to reply? Would you like a customer to ignore what he owes you?

If you pay this bill by January 1, you may deduct 2%. Will you not help us to maintain the quality of our goods and service by paying promptly?

Yours very truly,

4. Proof-read as explained in Lesson Plan Four.
5. Check-up for dismissal.

COURSE OF STUDY IN TYPEWRITING

PLAN FOR LESSON TWENTY-FIVE

A. Pre-Lesson Procedure by Teacher.

Aim of Lesson: To make the locations and reaches which are necessary in writing numbers and special characters automatic.

B. Lesson Procedure by Teacher and Pupils.

1. Self-reliance work: (Ten minutes. Recopy if time permits.)

Dear Sir:

We sent a remittance of \$560 to you on October 23. This remittance was intended to cover the cost of 1478# of washing compound. We are sorry that your invoice did not receive more prompt attention, but the fact of the matter is that I was away on a business trip and my secretary did not have access to my desk.

If the balance of the last order has not been shipped, please hold it until the first of the month. We shall inform you of your needs for the winter as soon as possible.

Very truly yours,

(Conduct a one-minute finger gymnastic drill.)

2. Have the machines and desk cleaned.
3. Class work: (Ten minutes. Recopy if time permits.)

REVIEW

jjj fff jjj fff jjj fff hhh ggg hhh ggg hhh ggg uuu rrr uuu rrr uuu rrr
juj frf juj frf juj frf jhj fgf jhj fgf jhj fgf jhyhj fgtgf jhyhj fgtgf
jhy6yhj fgt5tgf jhy6yhj fgt5tgf jhy6yhj fgt5tgf j7j f4f j7j f4f j7j f4f
juyuj frtrf juyuj frtrf juyuj frtrf ju767uj fr454rf ju767uj fr454rf
jnj fvf jnj fvf jnj fvf jmhj fvbhf jmhj fvbhf jmhj fvbhf jn7j fr5f
kkk ddd kkk ddd kkk ddd kjhjk dfgfd kjhjk dfgfd kjhjk dfgfd kik ded kik ded
kdjfhgjfkf kdjfhgjfkf kdjfhgjfkf dkfjghfjdk dkfjghfjdk dkfjghfjdk dkfjghfjdk
k8k d3d k8k d3d k8k d3d k8k d3d k8k d3d k8k d3d k8k d3d k8k d3d k8k
ki8ik de3ed ki8ik de3ed ki8ik de3ed ki8ik de3ed ki8ik de3ed ki8ik de3ed
k,k dcd k,k dcd k,k dcd k,k dcd k,k dcd k,k dcd k,k dcd k,k dcd k,k dcd
191 s2s 191 s2s 191 s2s 191 s2s 191 s2s 191 s2s 191 s2s 191 s2s 191 s2s
lo9ol sw2ws lo9ol sw2ws lo9ol sw2ws lo9ol sw2ws lo9ol sw2ws lo9ol sw2ws
1.1 sxs 1.1 sxs 1.1 sxs 1.1 sxs 1.1 sxs 1.1 sxs 1.1 sxs 1.1 sxs 1.1 sxs
aqaza ;p0p; aqaza ;p0p; aqaza ;p0p; ;/; aza ;/; aza ;/; aza ;/; aqaza ;p0p;/;

(Conduct a one-minute finger gymnastic drill.)

4. Individual work: (Twenty or more minutes. Recopy if time permits.)

EXERCISE 1

Dear Sir:

Saturday we received a shipment of doors in a complete assortment of sizes. That is to say, we now have doors made of maple, walnut, gum, oak, chestnut, and birch in the following widths: 18", 20", 22", 24", 26", 28", 30", 32", 34", and 36". Heights range from 4' to 8'. As doors are of interest to you, please read the contract which we enclose and let me know if your company will place an order with us. We shall be glad to have your order for any number of doors you care to buy.

Yours truly,

EXERCISE 2

Gentlemen:

Please enter our order for the following goods to be shipped at once:

50# of Mocha coffee @ 17 $\frac{1}{4}$ ¢ a pound
40# of Java coffee @ 16- $\frac{3}{4}$ ¢ a pound
30# of Blended coffee @ 15 $\frac{1}{2}$ ¢ a pound

I understand that your terms are 2/10/, n/30. Your invoice will have our prompt attention.

Very truly yours,

5. Proof-read as explained in Lesson Plan Four.
6. Check-up for dismissal.

Second Group of Lessons

The first group of lessons places emphasis on proper techniques. This group seeks to establish a kinesthetic sense or memory of how correct fingering, correct manipulation, and correct shifting feels. With some degree of this kinesthetic sense established, there remains the need of sufficient attentive and correct practice to render the technique automatic by touch. To this end, it is necessary to effect a gradual transfer of control from "conscious direction" non-automatic, to "automatic response."

To accomplish this automatization, it is necessary to have careful and attentively directed repetition, patiently carried on during the prolonged period in which the appropriate nerve connections are being formed. An understanding of the physiological basis which makes such extended practice necessary helps the teacher to appreciate the need of patience and thoughtfulness in dealing with the shortcomings and slow progress of pupils, and emphasizes the fact that there is no substitute for properly directed and persistent practice.

To the end that practice may be properly directed and efficiently carried out, the second group of twenty-three lessons should be similar in form and content to the first group, but the objective of this entire group of lessons is changed to "Maintaining correct technique while typewriting with accuracy." (See Lesson Plans 1 to 5, pages 19 to 28.)

The teacher will note that no emphasis is placed on speed. "Hardly any one phase of typewriting has been so much discussed as speed. Some teachers will not agree that speed is a dangerous subject for beginners, for they believe in pushing the work in speed almost before the keyboard is covered. Some even give beginners fifteen-minute speed tests in the belief that they are shortening the period of speed development. On the contrary, they gain nothing in net words written, for after the work in speed acceleration must come stringent work in accuracy. Most pupils can never become accurate writers, if the work in speed comes first."

"Try this experiment: Select two pupils of equal ability. With one begin strenuous speed work as soon as the keyboard is covered, emphasizing accuracy too. With the other do not write beyond a moderate rate, and discourage speed acceleration, but strongly emphasize accuracy first, and when that is acquired, begin speed work gradually. These pupils will be found of equal ability at the end of the year, or, if a difference exists, the latter will have the highest net speed—the thing that counts." (Clem, "Technique of Teaching Typewriting," p. 140.)

In the outline for the second group of lesson plans, this course suggests only the material to be used for "class work." The full details of a lesson plan should include the following: Assign self-reliance work from a textbook. Give the class-work drill as herein provided. Assign individual work from the textbook, being careful to make a minimum and several supplementary assignments. Finally, have the proof-reading check-up. The class-work drills, as herein planned, are based on the second group of five hundred commonest words.

PLAN FOR LESSON TWENTY-SIX

AIM: Accuracy, and to review the finger reaches involved in writing two and three-letter sequences.

1. Self-reliance work: To be devised by teacher.¹

2. Class work: (Ten minutes. Lefthand sequences,² the typing to be controlled by metronome, music, or tapping.)

at at at be be be es es es ce ce ce we we we se se se re re re ct ct ct
ad ad ad ar ar ar de de de as as as ed ed ed va va va rt rt rt er er er
ca ca ca st st st ve ve ve ec ec ec ta ta ta xc xc xc av av av aw aw aw

(Righthand sequences:)

in in in io io io on on on pu pu pu lo lo lo po po po ul ul ul mi mi mi ll ll ll
ly ly ly ho ho ho pl pl pl om om om un un un li li li pp pp pp mp mp mp il il il
pi pi pi ju ju ju lu lu lu oy oy oy hi hi hi ni ni ni up up up oo oo oo mm mm mm

(Three-letter high frequency sequences:)

any any any got got got ice ice ice has has has all all all get get get
but but but one one one the the the you you you put put put led led led
poy poy poy not not not her her her are are are day day day mat mat mat

If time permits, review the class work of Lesson One.

¹ The self-reliance work to be assigned in the second and third groups of lesson plans may be based on the errors made during the previous day's practice. See reference to practice-out days on page 22.

² From corrective drills by D. D. Lessenberry, published by L. C. Smith & Corona Typewriters, Inc. The purpose of drill upon sequences is kineesthetic. In other words, memory of motion. The pupil should endeavor to remember the reaches, particularly in such sequences as ab, mp, nl, bt, etc.

COURSE OF STUDY IN TYPEWRITING

3. Individual work: (Assignment from the textbook.)

Motivation and Drill: Because effective activity is put forth only when a drill is felt to have value for the pupil, all learning is dependent upon interest. In the first stages of learning to type-write, interest is inherent, but rare indeed are the cases where the interest continues to hold sufficient charm to sustain throughout the learning period the burden of monotonous drill and to withstand the competition of more novel objects of attention. The recognition of this fact led progressive teachers to develop numerous "devices" for stimulating at least temporary interest in drill. Such devices are contests, displays of papers, and projects.

In order to distinguish the better plans for enlisting interest from the less desirable sort, the term "motivation" is used. It is properly used to designate a plan for stimulating interest in school work by having the pupil discover its essential value to him, and the realization that its mastery is necessary to the accomplishment of his own purposes. The best form of motivation is usually found in connection with the project type activities. Such activities take the form of individual work in the typewriting class and the projects assigned should vary as skill is developed in accordance with the individual needs of the pupil. Needs are determined by the pupil and the demands made by the establishment in which the pupil expects to find employment.

The figures and special characters. One of the most frequent occasions for disappointment on the part of the teacher is the discovery that certain habits and skills which had been brought to a satisfactory standard have, after an interval of only a few weeks, deteriorated to a most discouraging degree. This is due to the "Law of Disuse," and tends to be especially noticeable in those habits, the formation and exercise of which have occupied only a relatively short time. The remedy for this condition is to provide in practice for reducing gradually the time given to an activity and also to plan situations which will require the exercise of a habit often enough to keep it alive and functioning. To this end, as soon as the fingering and reaches incident to using the figures and special characters have been developed, the use of figures and special characters should be provided for frequently in subsequent lesson plans.

4. Proof-reading and error analysis. (See pages 25 to 28.)

PLAN FOR LESSON TWENTY-SEVEN

AIM: Same as Lesson Twenty-Six.

1. Self-reliance work: (To be devised by the teacher.)
2. Class work: (Ten minutes. Lefthand sequences controlled.)

rc rc rc ag ag ag te te te ts ts ts da da da dg dg dg ss ss ss dr dr dr
ea ea ea cr cr cr bs bs bs rd rd rd ra ra ra tt tt tt wa wa wa ef ef ef
ge ge ge sa sa sa xt xt xt eq eq eq ac ac ac ab ab ab ee ee ee sc sc sc

(Righthand sequences:)

no no no ui ui ui mu mu mu mo mo mo yi yi yi ol ol ol yo yo yo nu nu nu
ip ip ip ol ol ol yo yo yo nu nu nu ip ip ip nn nn nn ym ym ym hu hu hu
uo uo uo kn kn kn my my my oi oi oi jo jo jo nk nk nk lm lm lm yp yp yp

(Three-letter sequences: When typing this exercise, repeat each sequence three times.)

how for had let did and lit man art lad moy now abl dit glo ban adv com

If time permits, review the class work of Lesson Two.

3. Individual work: (Assignment from the textbook.)
4. Proof-reading and error analysis.

PLAN FOR LESSON TWENTY-EIGHT

AIM: Same as Lesson Twenty-Six.

1. Self-reliance work: (To be devised by the teacher.)
2. Class work: (Ten minutes. Lefthand sequences controlled. When typing this exercise, repeat each sequence three times.)

LESSON PLANS FOR FIRST SEMESTER

af ds va tr gr tw fe ga fr eg dv dt ff ax cs ev ff ax cs ev ws ex re rg ft

(Righthand sequences:)

lp lk ky kl nl py ik im oh np hl ny uy ui ki hy nm ph nj mn um yl ln u' -h o'

(Three-letter sequences:)

ese jus efa las omp ste uch ain eau ade dly eci col ion eip our nte kno ust

If time permits, review the class work of Lesson Three.

3. Individual work: (Assignment from the textbook.)¹

4. Proof-reading and error analysis.¹

PLAN FOR LESSON TWENTY-NINE

AIM: Same as Lesson Twenty-Six.

2. Class work: (Lefthand sequences:)

sw ze fa xa sd ew az cw br xe bt dd gs wr za wf sb tc sf rf eb rw tb gt rb tg
cc rv bb

(Righthand sequences:)

pm 'l y- n, 'm n' i' yh k- ok ku op y' o. in on he om un il pp mp pi up

(Three-letter sequences:)

ssi tiv tha oun ite nly abo div ego fin con ith eir lso mus pro ore ten unt

If time permits, review the class work of Lesson Four.

PLAN FOR LESSON THIRTY

AIM: Same as Lesson Twenty-Six.

2. Have machines and desk cleaned.

3. Class work: (Sequences controlled by both hands:)

ai he bl is ch la di ma el nc fi me co ha en or gh ow ay dl ne an it bo ke
cl nd fo pa ri us se ye th ng le ap to nt cy eh mb al ht du ns wi ot ek ig

(Three-letter sequences:)

ver aft giv fro ein inc ber ame ous thi res tio num pos mer tle att cho don

If time permits, review the class work in Lesson Five.

PLAN FOR LESSON THIRTY-ONE

AIM: Same as Lesson Twenty-Six.

2. Class work: (Sequences controlled by both hands. Instead of writing each sequence three times, write each sequence once, then repeat, and repeat a third time.)

ua ry vi ov qu ir sh na ti ov ek oc ld ic ro ub ty od su iv am nv cu ib tl
ie go us wh ix gu eo hb pr id ak pt bi of em ug zy ms co ia dy ue it ep gi

(Three-letter sequences: Write the exercise once, then once again, and once again a third time.)

hav emb ing ord lik rde one tak pla ove ase ind ine app con sed rit lea ted
pri nam ank ive hea etu dvi oul tru pre kin muc ven dea igh ese ink ext ide
eiv der ake int

(If time permits, review the class work in Lesson Six.)

¹ These two lines are omitted in subsequent plans, but the teacher will, of course, include individual work and proof-reading in all lesson plans.

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PLAN FOR LESSON THIRTY-TWO

AIM: Same as Lesson Twenty-Six.

2. Class work: (Sequence controlled by both hands. Write each sequence once, then rewrite the exercise twice.)

ys tu e' ps xi ru ks rl oa wn ls gl us ei lf fo pe fu if sl ud ci os ur wo
f. ah oe bu mc fl je gn iz tm ox au yb rp us by og rn lv sp rm r, dn hr wl
ya xp nf zi pf rh nq gm kg dj lr ey ja dm oz e- rk f. bm lc aj yw sm hd vy
mr ac lb sy lw bj mf cn ka sn yt t' sk s. fy 't -b nr gy 's d. hf r' nx d-
hs c. -f v. -e si xh 'u t. ai he bl is ch ia di ma el nc fi me co ha cn di

Review the class work in Lesson Seven.

PLAN FOR LESSON THIRTY-THREE

AIM: Same as Lesson Twenty-Six.

2. Class work: (Initial syllables. Write the exercise as is and then repeat the writing twice again.)

as of be or at no it is on by to an go am do in ma pa al op un ap de im en
ac di ev fa ex ad re ar so fi po can say for haw get his nwe but did not
let him out few fur com per con pre hav pro cer pos oth cop dis bus lit
aft nev ship like send find book dear have some kind made good long bout
pres writ cred feel down morn know moth same sure with could first check
there great think count build class

Review the class work in Lesson Eight.

PLAN FOR LESSON THIRTY-FOUR

AIM: Accuracy and the mastery of the finger reaches involved in the common four-letter words.

2. Class work: (Write the exercise as given, then rewrite it twice.)

blue boys cars cash club deal door else etc. eyes face fair fall farm fear
feet felt file fill fire form free game goes hair head held hold how idea
item July June kept lady land late live loss lost lots mean mine miss Miss
most Mrs. news page plan poor post rain rate road read save says seen sell
ship sick side sigh sold some sort stop suit till trip true turn view wait
walk warm whom wife wire word.

Review the class work in Lesson Nine.

PLAN FOR LESSON THIRTY-FIVE

AIM: Accuracy and the mastery of the finger reaches involved in the common five-letter words.

2. Have the machines and desk cleaned.
3. Class work: (Write the exercise, as given, three times.)

agent agree allow alone among apply April awful basis begin bills black blank
board can't carry cases cause child claim clear comes dance dated don't dozen
draft dress eight enjoy error extra files floor folks fully funny girls gives
grade hands heart hours inst. isn't issue items known learn light lines local

Review the class work in Lesson Ten.

PLAN FOR LESSON THIRTY-SIX

AIM: Accuracy and the mastery of the finger reaches involved in the common five-letter words.

2. Class work: (Write the exercise, as given, three times.)

makes March maybe means miles music notes often ought parts piece plans plant
point power quote reach refer right sales sense serve seven sheet shown sleep
speak spend spent stand start store story study style sweet teach terms third
times tired total touch trade train tried using usual visit water while white
woman women won't words worth wrong about above again going goods since would

Review the class work in Lesson Eleven.

LESSON PLANS FOR FIRST SEMESTER

PLAN FOR LESSON THIRTY-SEVEN

AIM: Accuracy and the mastery of the finger reaches involved in the common six-letter words.

2. Class work: (Write the exercise, as given, three times.)

action advise afraid anyone anyway appear asking assure attend August become
bought chance church common copies charge county couple decide didn't direct
doctor effect effort entire excuse family father fellow filled finish follow
forget Friday ground handle happen hardly health hoping inform latter living
locate longer looked lovely mailed manner market matter moment nature neatly

Review the class work in Lesson Twelve.

PLAN FOR LESSON THIRTY-EIGHT

AIM: Accuracy and the mastery of the finger reaches involved in the common six-letter words.

2. Class work: (Write the exercise, as given, three times.)

notice oblige others papers passed period person placed places policy proper
public result sample saying season secure seemed signed sister spring stated
states street strong surely talked thanks thirty trying turned twenty unless
wishes wonder writer accept advice almost always amount answer around before
better called change coming course credit desire during either enough except

Review the class work in Lesson Thirteen.

PLAN FOR LESSON THIRTY-NINE

AIM: Accuracy and the mastery of the finger reaches involved in the common seven-letter words.

2. Class work: (Write the exercise, as given, three times.)

advance advised allowed anxious arrange arrived article brother brought
calling careful carried catalog certain charged charges college correct
covered dearest decided doesn't dollars exactly expense decided feeling
follows freight friends greatly haven't himself history holding hundred
imagine include inquiry account address against already another balance

Review the class work in Lesson Fourteen.

PLAN FOR LESSON FORTY

AIM: Accuracy and the mastery of the finger reaches involved in the common seven-letter words.

2. Have machine and desk cleaned.

3. Class work: (Write the exercise, as given, three times.)

instead leaving machine manager married matters members mention minutes
obliged o'clock October opening opinion package picture program purpose
reached reading realize records regards regular reports running showing
similar started station success suggest teacher tonight Tuesday various
waiting willing working because believe company enclose forward furnish

Review the class work in Lesson Fifteen.

PLAN FOR LESSON FORTY-ONE

AIM: Accuracy and the mastery of the finger reaches involved in the common eight-letter words.

2. Class work: (Write the exercise as given. By practicing words in syllables as well as in full, we learn to divide them correctly at the end of lines.)

ad ad ad di di di addi addi addi tion tion tion addition addition addition
ad ad ad vis vis vis advis advis advis ing ing ing advising advising advising
al al al though though though although although although all all all and and
ap ap ap prov prov prov approv approv approv al al al approval approval approval
at at at tach tach tach attach attach attach ed ed ed attached attached attached

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build build build building ing ing building building building built built built
child child child chil chil chil dren dren dren children children children
con con con sid sid sid consid consid consid er er er consider consider consider
con con con tin tin tin contin contin contin ue ue ue continue continue continue
cus cus cus to to to custo custo custo mer mer mer customer customer customer
De De De cem cem cem Decem Decem Decem ber ber ber December December December
de de de fin fin fin defin defin defin ite ite ite definite definite definite

Review the class work in Lesson Sixteen.

PLAN FOR LESSON FORTY-TWO

AIM: Same as that for Lesson Forty-One.

2. Class work: (Write the following words in the manner suggested in Lesson Forty-One.)

de liv er y	ex change
dis count	ex pec ted
di vi sion	fin ished
ear li est	hand ling
en tire ly	in crease
en vel ope	judg ment

Review the class work in Lesson Seventeen.

PLAN FOR LESSON FORTY-THREE

AIM: Same as that for Lesson Forty-One.

2. Class work: (Write the following words in the manner suggested in Lesson Forty-One.)

na tion al	prac tice
No vem ber	prop er ty
o rig i nal	pur chase
per son al	re cent ly
plan ning	re ferred
pleas ant	rel a tive
pos si bly	re quired

Review the class work in Lesson Eighteen.

PLAN FOR LESSON FORTY-FOUR

AIM: Same as that for Lesson Forty-One.

2. Class work: (Write the following words in the manner suggested in Lesson Forty-One.)

re quests	think ing
sep a rate	thou sand
ship ping	Thurs day
some time	trust ing
stand ard	va ca tion
teach ers	what ev er
teach ing	your self

Review the class work in Lesson Nineteen.

PLAN FOR LESSON FORTY-FIVE

AIM: Same as that for Lesson Forty-One.

2. Have the machine and desk cleaned.

3. Class work: (Write the following words in the manner suggested in Lesson Forty-One.)

ac cord ing	be gin ning	du pli cate
ad dressed	care ful ly	ed u ca tion
ad van tage	char ac ter	e quip ment
an swer ing	com mit tee	ev er y body
a vail a ble	con di tion	for warded
beau ti ful	de liv ered	gen tle men

Review the class work for Lesson Twenty.

LESSON PLANS FOR FIRST SEMESTER

PLAN FOR LESSON FORTY-SIX

AIM: Same as that for Lesson Forty-One.

2. Class work: (Write the following words in the manner suggested in Lesson Forty-One.)

im me di ate	oth er wise	re requested
im por tant	our selves	sec re ta ry
in clud ing	pres i dent	Sep tem ber
in sur ance	pur chased	ship ments
know ledge	ques tions	sit u a tion
men tioned	re ceiv ing	some times

PLAN FOR LESSON FORTY-SEVEN

AIM: Same as that for Lesson Forty-One.

2. Class work: (Write the following words in the manner suggested in Lesson Forty-One.)

sur prised	ad di tion al	es pe cial ly
ter ri tory	ad just ment	ex pe ri ence
Wed nes day	col lec tion	gov ern ment
won der ful	con cern ing	mem o ran dum
ab so lute ly	con di tions	par tic u lar
ac cord ance	dif fer ence	set tle ment

PLAN FOR LESSON FORTY-EIGHT

AIM: Same as that for Lesson Forty-One.

2. Class work: (Write the following words in the manner suggested in Lesson Forty-One.)

u ni ver si ty	con ven ience	in struc tions
ac knowl edge	co op er a tion	par tic u lar ly
ad ver tis ing	ex am i na tion	re quire ments
ap pli ca tion	im pos si ble	con sid er a tion
ap pre ci at ed	in ter est ing	un der stand ing
ar range ment	mer chan dise	cor re spond ence
as so ci a tion	con sid er a ble	

Third Group of Lessons

The objective of the third group of lessons is: Maintaining correct technique and accuracy while increasing the speed of writing.

With the introduction, for the first time, of the conscious element of speed, we should consider the relation of accuracy to speed.

"Accuracy is attained by concentration, speed by well-directed practice; both depend upon perfect familiarity with the machine."

"Much¹ has been written on the subject of speed in typewriting, but the less said about it to the beginner in the art, the better, unless it be that he should be warned to let speed alone until he has acquired habits of accuracy and sound technique. Accuracy is of first consideration. Speed is necessary, of course, but it is something that must be built on the solid foundation of accuracy. Speed does not come so much from rapidity in stroking as it does from continuity in stroking. A steady, uninterrupted pace in evenly-timed rhythmic strokes will produce much more work in a day than is produced by typists who rush along rapidly but spasmodically and whose work is interrupted by frequent stops to make corrections. Of course, when the habit of accuracy has been formed, some work must be done to accelerate movement—but this should never be attempted at the expense of accuracy."

"When² the student can operate the keyboard with certainty, when he knows the exact location of every key and can strike it unhesitatingly, he can begin some work in accelerating movement. If there is any one subject that makes an appeal to the student of typewriting, it is the subject of speed. Leave a beginner to his own devices and in three days he will be practicing for speed, or at least what he thinks is speed. This tendency shows that the value of speed is appreciated, and rightly so.

¹ SoRelle, Rupert.

² Clem, Jane, Technique of Teaching Typewriting.

COURSE OF STUDY IN TYPEWRITING

"Speed is not merely a matter of tapping a great number of keys in a given time. It is the result of continuous operation, of an even flow of power, of poise, of control, of keeping constantly at it.

"The acquisition of speed in typewriting may readily be divided into three phases: (1) the individual-letter phase, which deals with the letters of a word as individual units; (2) the group phase, when the letters of words are handled in groups, much as they are in shorthand writing; (3) the 'continuous-matter' phase, which includes the writing of sentences, paragraphs, or words."

By the end of Lesson Forty-Eight, pupils are still in the first phase. It is the hope of the teacher that by the time the pupil has completed the third group of lessons, he will be in the second phase—at least for the commonest words. Lesson aims will vary according to the lesson, and the materials of instruction should be based primarily on the third group of five hundred commonest words.

From studies made by the Division of Commercial Education in Philadelphia, it has been ascertained that from seventy to seventy-five per cent of the words in the average business letter are in the list of the first five hundred commonest words (Horn). These five hundred words were drilled upon in Lessons One to Twenty-Five. Studies made by the division also demonstrate that from seventy-five to eighty-five per cent of the words in business letters are in the lists of the first and second five hundred commonest words. All of the second five hundred commonest words are included in our "class work" drills in Lessons Twenty-Six to Forty-Eight. With the drill upon the list of the third five hundred commonest words, as provided for in this group of lessons, from eighty-five to ninety-three per cent of the vocabulary of the business man will have been learned. By referring to Lesson Plans One to Six, pages 19 to 29, teachers will find models for their guidance in making Lesson Plans Forty-Nine to Sixty-Eight. For the class work in these plans, group "The Third Five Hundred Commonly Used Words," as we have arranged them in the "class work" of Lessons Twenty-Six to Forty-Eight. If twenty-five new words are drilled upon in each lesson of this group, the list of the third five hundred commonest words can be covered in twenty lessons.

In each day's class work review as much as possible of the class work for the corresponding day in the second group of lessons. Example: After doing the class work of Lesson Forty-Nine, review the class work of Lesson Twenty-Six, etc. Also continue the practice of giving four lessons from these plans each week. Reserve the fifth day of the week for practicing out errors. The outline for this kind of drill is presented in greater detail on page 52-53.

THE LIST OF THE THIRD FIVE HUNDRED COMMONLY USED WORDS

(Horn)

THREE-LETTER WORDS

aid air art cry dog dry egg fix gas ice ill lay mad net nor oil owe pen per pie
sat sew sit son sun ton top wet

FOUR-LETTER WORDS

aunt ball bear beat body bond cent coal coat corn dark dead deep died drop duty
east easy fail fast feed firm foot gets gold hate hurt iron loan lose luck main
milk move nine none noon ones pair papa pass ride rule rush safe shop snow team
term thus type wear west wild wind yard.

FIVE-LETTER WORDS¹

add ed, a head, bad ly, be gan, be low, box es, break, brown, build, bunch,
calls, can dy, cards, cents, clean, col or, count, court, crowd, dai ly, death,
doors, drive, en ter, e vent, facts, fault, field, fif ty, fight, fi nal, fixed,
force, glass, grand, green, heav y, hon or, ho tel, hu man, hur ry, judge, knows,
la bor, laugh, liked, lives, looks, low er, lunch, mam ma, meant, moved, names,
needs, north, not ed, ow ing, pag es, peace, phone, plain, print, proof, proud,
prove, qui et, raise, re mit, riv er, round, shape, share, shows, sight, siz es,
sound, south, space, spoke, ta ble, takes, truth, twice, un cle, un ion, wants,
watch, whose, works, wor ry, worse

SIX-LETTER WORDS²

ab sent, a cross, an nu al, ar rive, as sist, as sume, beau ty, be hind, be yond,
bot tom, brok en, can cel, caused, checks, closed, cous in, cov ers, de gree,

¹ Practice long words by syllables as well as complete.

² See development of "class work" in lesson 41.

LESSON PLANS FOR FIRST SEMESTER

de mand, dol lar, dou ble, eas i ly, en a ble, ex tent, failed, fig ure, for got, form er, fourth, gar den, glad ly, got ten, grades, high er, hon est, hous es, in tend, is sued, it self, lad ing, larg er, late ly, like ly, list ed, marked, mem ber, mere ly, meth od, mid dle, might y, min ute, missed, mo tion, mov ing, need ed, nice ly, no bod y, nor mal, no ti fy, ob ject, ob tain, o pened, pay ing, per mit, played, plen ty, points, pre fer, sal a ry, sim ply, sin gle, so cial, soon er, spir it, stayed, sup per, sys tem, thinks, toward, twelve, val ued, vol ume, weight, win dow, wished, worked.

SEVEN-LETTER WORDS²

ab sence, af fairs, a mount, ap pears, ap plied, ar riv al, as sured, at tempt, av er age, aw ful ly, ben e fit, be sides, chang es, changed, class es, clothes, col lect, dar ling, de sired, de tails, en joyed, en tered, ex plain, fa cul ty, fel lows, fif teen, fig ures, fi nal ly, flow ers, for eign, for give, great er, han dled, hear ing, hus band, in stant, in vit ed, keep ing, kind est, know ing, learned, lib er ty, li bra ry, lo cat ed, mail ing, meas ure, mis take, nat u ral, nei ther, num bers, of fered, out side, per fect, per sons, play ing, por tion, post age, pre pare, pre sume, print ed, priv ate, prob lem, prom ise, put ting, qual i ty, quar ter, re quire, re spect, re sults, sam ples, schools, sec tion, sell ing, se ri ous, set tled, sit ting, so ci e ty, some one, stat ing, stopped, strange, talk ing, tell ing, u su al ly, wel come, west ern, wish ing.

EIGHT-LETTER WORDS²

ac cept ed, ac counts, A mer i can, an swered, ap proved, ar ranged, ar ti cles, as sur ing, a wait ing, birth day, can celled, cir cu lar, cred it ed, de ci sion, dis trict, en dea vor, en ti tled, es ti mate, ev er y one, Feb ru a ry, friend ly, grad u ate, great est, guard i an, hap pened, hos pi tal, in as much, in clud ed, in di cate, in formed, in stance, in tend ed, in voic es, kind ness, lo ca tion, lone some, lov ing ly, mean time, mort gage, no ta tion, oc ca sion, of fi cers, or di na ry, pic tures, pre pared, pre vi ous, prob lems, prom ised, prop er ly, quan ti ty, rail road, re port ed, re sponse, some what, splen did, stand ing, straight, stu dents, stud y ing, sup posed, sur prise, tel e gram, tel e phone, ter ri ble, train ing, when ev er.

NINE-LETTER WORDS²

a gree ment, a mount ing, break fast, Christ mas, com plet ed, con cerned, dif fi cult, ev i dent ly, ex cel lent, ex cep tion, ex pect ing, ex ten sion, ex treme ly, fa vor a ble, fi nan cial, for got ten, fur nished, gen er al ly, gen tle man, hap pi ness, nat ur al ly, ne ces si ty, per fect ly, prin ci pal, pub lished, re com mend, re fer ring, sat is fied, sug gest ed, tel e phone, won der ing.

TEN-LETTER WORDS²

ac quain ted, ap par ent ly, as sist ance, com mis sion, con sid ered, con ven i ent, def i nite ly, dif fi cul ty, for ward ing, im pres sion, in vi ta tion, lit er a ture, per son al ly, rea son a ble, state ments, suc cess ful, suf fi cient, sug ges tion, them selves, thor ough ly.

ELEVEN-LETTER WORDS²

ac cord ing ly, cer tif i cate, de scrip tion, ex pla na tion, im me di ate ly, pos si bil i ty, prac ti cal ly, sug ges tions, un doubt ed ly.

TWELVE-LETTER WORDS²

ar range ments, con se quent ly, con ver sa tion, dis ap point ed, or gan iza tion, sat is fac tion.

THIRTEEN-LETTER WORDS²

cir cum stanc es, com mu ni ca tion.

FOURTEEN-LETTER WORDS²

rep re sent a tive, su per in tend ent.

¹ Practice long words by syllables as well as complete.

² See development of "class work" in lesson 41.

Instruction in the Second Semester

We have planned twenty-five lessons and six practice-out periods with technique as the important objective; twenty-three lessons and six practice-out periods with technique and accuracy as the important objective, and twenty lessons and five practice-out periods with technique, accuracy, and the acquirement of speed as the important objective. Spend the remaining two weeks of the first semester upon review and other work designed to develop individual skill in copying with technique, accuracy and speed. The speed requirement on straight copy by the end of the first semester should be **fifteen words a minute for the slow pupils, twenty words a minute for the pupils of fair ability and twenty-five words a minute for the good pupils.**

IMPORTANT PROBLEMS

1. Motivation after the novelty has worn off. The beginning work in typewriting is interesting and comparatively easy. The pupil comes to the work with a keen initial interest to learn typewriting. The machine is a new toy. The operation of it he is eager and enthusiastic to master, and the first skills to be learned are simple of attainment. It is none the less true that if the first lessons are not properly taught, much harm may be done. The most important week in the typewriting class is the first one; typists are made or marred in the first month.

But, even if it is granted that a correct start has been made, interest often wanes when the pupil reaches the continuous drill phase of Typewriting II. In the second semester the problems in lesson planning are concerned with the analysis of errors, error elimination and drill, drill, drill. In those schools which offer four semesters of pre-transcription typewriting drill, the problem of motivation is even greater.

It is, therefore, in the advanced stage of elementary drill that our problem is most difficult. In other words, the problem is one of sufficient well-directed practice for each individual pupil. Sufficient drills will develop to the highest degree of which he is capable, his speed, accuracy, and technique on any style, form, or arrangement of typewritten work which he may later be expected to do. Many of these types of drills should be varied in accordance with the community needs, as revealed in surveys. The elements in the problems of lesson planning to develop speed with technique and accuracy are: 1—Varied and well-chosen types of drill fitted to individual needs; 2—motivation and interest; 3—well-chosen types of tests; 4—diagnosis of errors; 5—practicing out errors; 6—analysis of the vocational needs of the pupil—for example, making a study of the forms our pupils will need to know in the offices in which they are likely to find employment; 7—speed in typewriting and arranging conventional letter forms.

2. Establishing ability to properly arrange the letter. In order to establish a sense of style and arrangement the pupil should be aware of the following facts:

a. The capacity of a sheet of 8½ by 11-inch paper, in the case of machines provided with pica type, is: There are ten-letter spaces to the inch horizontally, and six line spaces to the inch vertically, single spaced. Consequently, the maximum length of line is 75 to 80 spaces and the maximum number of lines

which can be crowded on the eleven-inch paper single spaced is sixty-six. (See page 60.)

The average letter is not more than one hundred words in length. If pupils will observe the number of words they write to the line in shorthand, they will soon be able to determine within five or ten words just how long a given letter is.

Have pupils study the rules for centering as given in sections b, c, and d. To learn them most efficiently, they should think of the line to be typed in terms of inches. From one numbered section on the typewriter scale to the next, in the case of machines equipped with pica type, is one inch, and since the length of the average word is four letters and one space, approximately two words can be written to the inch. Have pupils make a typed copy of the chart which appears on page 59. This chart will enable them to determine the line on which to begin letters of known length. Such a chart should be pasted in the back of the dictation book for ready reference.

b. The heading—

THE ARLINGTON HIGH SCHOOL
Forty-fourth and Lehigh Avenue
Arlington, Pa.

which appears in the illustrative letters on page 59, is designed to take the place of the printed heading. If teachers will have their pupils use this type of heading on all letters, substituting for "Arlington" the name of their school, and changing the address, they will find it quite helpful. Impress upon pupils that since this heading takes the place of the printed heading, the first line of it should always begin four single spaces below the top edge of the paper. The date should be from four to six spaces below Arlington, depending upon the length of the letter.

c. The typed letter is often compared to a picture on a mat for framing: According to Greek proportions, which are the usual artistic standard; "In a vertical oblong, the bottom margin should be widest, the top next in width, and the sides narrowest." In the case of a letter, the space between the name of the addressee and the printed heading would be considered the top margin.

d. In centering, the principle is: Place half of the line on each side of the center. If the center of the paper is at the center of the scale, as explained in paragraph 3, page 11, "Standard paper insertion,"

STYLE AND ARRANGEMENT

CENTERING CHART

WHEN USING SINGLE SPACED LINES			WHEN USING DOUBLE SPACED LINES		
Length of Letter	Length of Line	Begin Name of Person Addressed	Length of Letter	Length of Line	Begin Name of Person Addressed
55 words	40 spaces	On line 23	60 words	40 spaces	On line 19
70 words	40 spaces	On line 22	75 words	40 spaces	On line 17
85 words	40 spaces	On line 20	80 words	50 spaces	On line 19
100 words	40 spaces	On line 19	90 words	50 spaces	On line 18
115 words	40 spaces	On line 18	100 words	50 spaces	On line 17
130 words	40 spaces	On line 17	110 words	50 spaces	On line 16
140 words	50 spaces	On line 18	120 words	50 spaces	On line 15
150 words	50 spaces	On line 17	125 words	60 spaces	On line 17
160 words	50 spaces	On line 16	130 words	60 spaces	On line 15
170 words	50 spaces	On line 15	140 words	60 spaces	On line 13
180 words	60 spaces	On line 20			
200 words	60 spaces	On line 18			
220 words	60 spaces	On line 16			
240 words	60 spaces	On line 15			

Figure 15—Centering Chart for Letters

THE ARLINGTON HIGH SCHOOL
Forty-fourth and Lehigh Avenue
Arlington, Pa.

January 11, 1930

Mr. Henry F. Collins,
6742 Ridge Avenue,
Honolulu, Hawaii.

Dear Sir:

Your letter of September 19, addressed to Mr. George Barr, has been referred to me. While the personnel of applicants has not yet been fully determined, we believe that the officials prefer to fill the local positions with recent graduates from our schools.

Also, it is not the desire of this committee seriously to deplete the available number of stenographers in this city. Therefore, they hesitate to send inexperienced stenographers to Washington.

We wish to thank you for writing to us and if a change is made, we will advise you.

Very truly yours,

M.F.C.-E Principal.

Figure 16—Indented Style. 100 Words. 40 Space Line. Set Stops at 20 and 60. Begin Name on 20th Line

COURSE OF STUDY IN TYPEWRITING

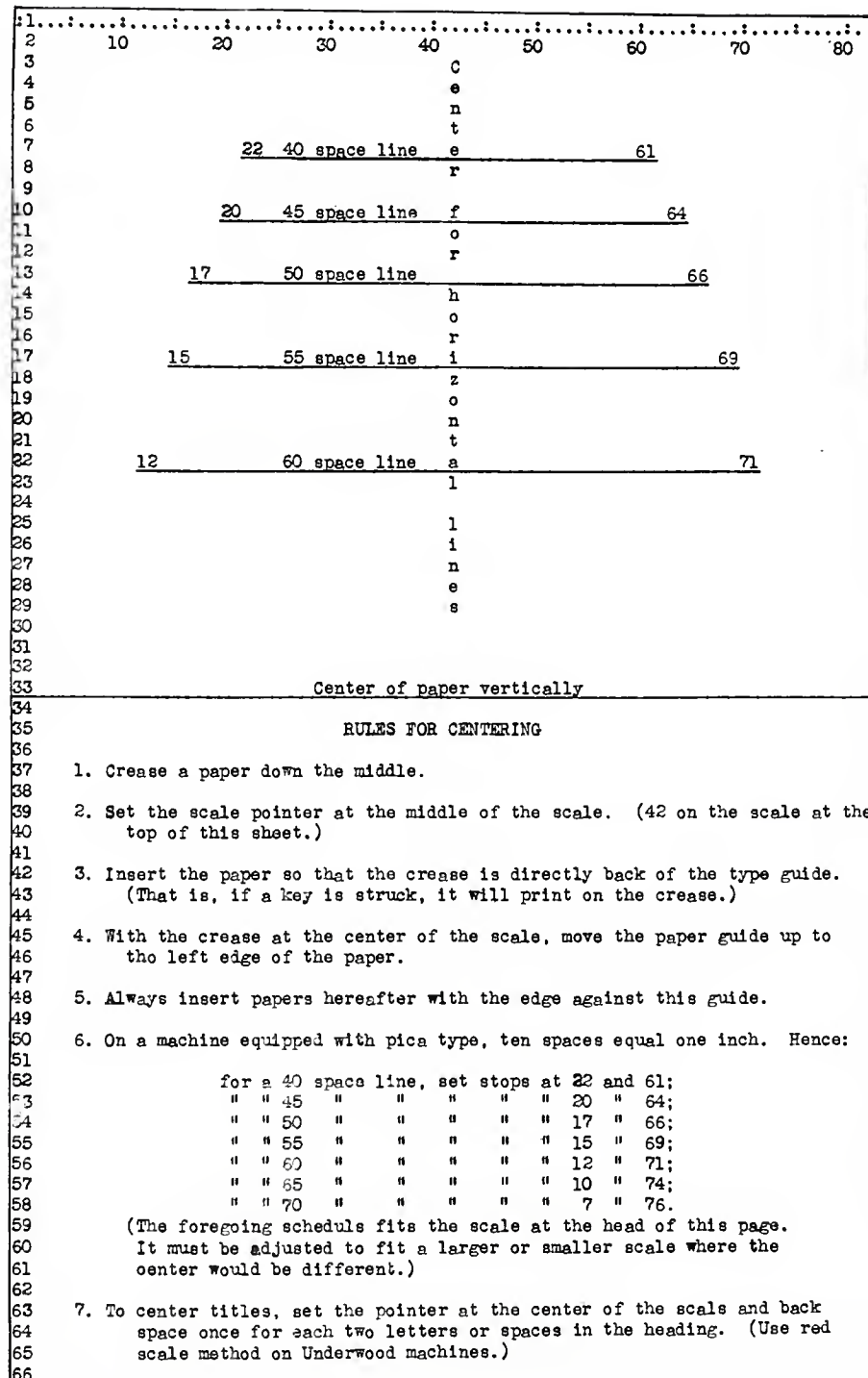


Figure 17—Scales Which Indicate the Capacity of a Sheet of Paper

THE ARLINGTON HIGH SCHOOL
Forty-fourth and Lehigh Avenue
Arlington, Pa.

February
21
1930

Mr. H. O. Fry, Principal,
Consolidated High School,
Twenty-fourth and Walnut Streets,
Philadelphia, Pa.

Dear Mr. Fry:

You have doubtless noticed that The Evening Star prints a weekly column of news concerning the schools. This service is something special and is in addition to accounts of daily occurrences. Hence, we are eager to make the material as authentic and as representative as possible. To accomplish this end, we would appreciate your co-operation.

Will you please place The Evening Star on the mailing list to receive your school paper? These papers frequently supply a suggestion for an important news article of general interest.

At any time you have any special item, we would be pleased to have you send it in also. Address all such matter to the editor.

Respectfully yours,

Thomas Gates

LLW:J

Principal.

Figure 18—Block-Indented Style. 116 Words. 40 Space Line. Set Stops at 20 and 60. Begin Name on 18th Line. This Style Should Always be Typed Single Spaced

October
twenty-first
1930

Miss Janet M. Spears,
672 Columbia Avenue,
Denver, Colorado.

My dear Miss Soears:

We think you will be interested in our magazine guild. By means of it, the busy person may keep up with outstanding articles in all magazines, with a minimum expenditure of time and effort.

A special announcement of it together with a one-dollar, four-months'-trial, membership card are inclosed with this letter.

Very truly yours,

Thomas Gates

MKB-J

Principal.
Inclosure

Figure 19—Blocked Style. Should Always be Single Spaced. 60 Words. 40 Space Line. Set Stops at 20 and 60. Begin on Line 23

COURSE OF STUDY IN TYPEWRITING

THE ARLINGTON HIGH SCHOOL
Forty-fourth and Lehigh Avenue
Arlington, Pa.

October
Twenty-first
Nineteen Thirty

The Central Commercial College,
Louisville,
Kentucky.

Gentlemen:

May we direct your attention to the titles in our 1929-30 catalogue? These texts have been prepared expressly for use in all schools in which commercial subjects are being taught.

Our textbooks are of great practical value because they are the outgrowth of many years of study of pedagogic methods on the part of the authors.

Furthermore—

- the language is clear
- confusing and unimportant details are omitted
- fundamentals are emphasized
- the style is simple and (largely because of the wealth of illustrations from actual business) interesting to the student
- no effort is spared to make them accurate and reliable in every detail.

Another important fact: practically all of the texts listed in this catalogue were printed this year and several are still in press.

It will be a pleasure to send you an examination copy of any text in which you are interested. There is no cost—the only obligation is that you will agree to examine the book with a view to possible adoption.

Just indicate your selection on the convenient form enclosed and mail promptly.

Yours very truly,

Thomas Gates

Principal.

JEB-W
Enclosure

Figure 20—Blocked Style. 60 Space Line. 40 Space Line for Indented Part. Set Up on the Basis of 223 Words, Because There are 183 Words Plus Allowance of 4 Words Per Line in Indented Section. Begin on Sixteenth Line

BLOCK STYLE

THE ARLINGTON HIGH SCHOOL
Forty-fourth and Lehigh Avenue
Arlington, Pa.

August
Fourteenth
1 9 3 0

Charles J. Lee and Company,
2 Duane Street,
New York, N. Y.

Gentlemen:

If you will be good enough to examine, critically,
the enclosed specimens of lithography, you
will concede that it would be difficult to
improve on them in design, engraving, or in
the way the lithographing has been done.

You will find the lettering graceful and dignified
in its perfection of form, alignment, and spac-
ing, and the lithographing sharp and clean-cut.

They are, indeed, the product of men who know and
love their work and who strive for unusual ex-
cellence.

These specimens and our skill are bound to interest
you from a business standpoint, for our work is
of the finest quality and our prices are low.

We solicit your next order. Let us show you how we
would design your letterhead or other form,
and how our prices run. Our service, also, is
prompt and satisfying.

Yours very truly,

Thomas Gates

Principal.

BML:B
Enclosure

Figure 21—Hanging-Indentation Style. Should Always be Single Spaced.
140 Words. 50 Space Line. Begin on 18th Line. Set Stops at 20 and
65. Begin Name, Address, Salutation, First Line of Paragraphs,
Closing and Signer's Title at 15. Use the Margin Release
Key When Returning the Carriage to 15

COURSE OF STUDY IN TYPEWRITING

THE ARLINGTON HIGH SCHOOL
Forty-fourth and Lehigh Avenue
Arlington, Pa.

Office of
Principal

November
Second
Nineteen
Thirty

Mrs. John G. Shaw
326 Wabash Avenue,
Chicago, Ill.

Dear Madam:

It is a pleasure to send you the additional book which you mentioned in the last paragraph of your recent letter. It was not included in the first package you received, because I had inferred from your letter that your courses would relate exclusively to problems of organization.

Since, however, you are planning to give attention to motivation as well as other phases of methodology, you will undoubtedly find some of the other books mentioned in our price list of much use.

I hope to learn always of each of your needs just as they arise.

Cordially yours,

Thomas Gates

GEM/E

Principal.

Figure 22—100 Words. 50 Space Line. Begin on Line 17. Double Spaced
Letters Should Always be in the Indented Style

SPECIALIZED DISPLAY STYLE

THE ARLINGTON HIGH SCHOOL
Forty-fourth and Lehigh Avenue
Arlington, Pa.

April 23, 1932

Mr. William E. Norman,
President, Fourth National Bank,
Nashville, Tenn.

Dear Sir:

We are sending under separate cover the portfolio of Hammermill Bond samples which you requested.

These specimens have been prepared to show forms and letterheads applicable to your business and to give you an idea of how you can use our product to advantage.

Hammermill Bond is sold by our agents to your printer or lithographer who will be able to obtain any item you desire from any of the jobbers listed in the portfolio we are sending to you. We suggest that you take up the question of your work with your printer and see how you can save money by using Hammermill Bond.

We shall be pleased to have you drop us a line on receipt of the portfolio and to write us for any service which we may be able to give you.

Very truly yours,

HAMMERMILL PAPER COMPANY

Figure 23—Illustration of a Specialized Display Form. Should be Single Spaced

THE ARLINGTON HIGH SCHOOL
Forty-fourth and Lehigh Avenue
Arlington, Pa.

April 22, 1932

Mr. Jacob A. Huff,
540 Pine Street,
Pottstown, Pa.

Dear Sir:

We don't often bother our subscribers by asking them to do us a favor. We usually try to give more than we ask. But today, while the frank request we are going to make of you is rather an exception to the rule, we can't help feeling some justification for it because in doing us a favor you may at the same time do a real favor for a few of your friends.

Just now we are offering those who are not yet on our regular list a chance to receive The Literary Digest for the fifteen weeks covering the most important part of the Presidential Campaign for \$1.50. Will you give your friends a chance to take advantage of this offer by simply telling them to write their names and addresses on the enclosed card.

This will be a real favor to us, and, we think, to your friends. We believe you will do it in a cordial spirit of co-operation, so that we hesitate to suggest anything in the way of "quid pro quo," but if you would like a set of the four useful little hand-books, "Watch Your English," (a small reference library for improving business and social intercourse), we will take pleasure in sending them to you with our compliments in return for your trouble in getting five subscribers.

With cordial appreciation for your kindness, we are

Very sincerely yours,

Phil Literary Digest

THE LITERARY DIGEST

Enclosure

P. S. The words underlined are
for you, Mr. Busyman.

[Figure 25—Illustration of a Specialized Display Form. Should be
Single Spaced

THE ARLINGTON HIGH SCHOOL
Forty-fourth and Lehigh Avenue
Arlington, Pa.

Twenty-third
APRIL
1932

Mr. Philip F. Walton,
"Locust Lodge,"
Nashville, Tenn.

Dear Sir:

Shrubby
for
Next Year

I have recently been going over my own grounds with the idea of planting additional shrubbery. I do this because I can usually decide much better while plants are in leaf what I want for next year, for the reason that I can much more easily visualize the effects.

Fall
Planting
is Most
Ideal

There are also other reasons why this is the ideal time to plan. Shrubby and plants selected now and planted in the early Fall have ample time to become thoroughly rooted; for this reason they will be more thrifty next year and have a more luxuriant bloom. There are also not the delays of uncertain weather and transportation which frequently come later.

Special
Rates on
Early
Orders

During the summer months we make special rates to those interested in this important part of the home beautiful. Our landscape architects go anywhere for consultation, or we work out plans here in our office after having a ground sketch of some of the details of a problem.

May we serve you? Write to us for advice.

Yours sincerely,

Thomas Gates

Principal

Figure 24—Illustration of a Specialized Display Form. Should be
Single Spaced

ADDRESS ON ENVELOPES

set the pointer at that point and back space once for each two letters or space in the line to be centered.

On the Underwood machine, center by returning the carriage to "0"; strike the space bar for each letter and space in the title; then set the scale pointer at the same number on the white scale which was indicated on the red.

3. Lesson Planning. (Refer to Lessons One to Six, pages 19 to 29.)

- a. The lesson procedure by teacher and pupil should be as follows:

On four days give:

- (1) A ten-minute warming-up exercise; (Assign alphabetic sentences, rhythm sentences, opening sentences from letters of outstanding merit, good closing sentences, letter sequence drills, or other corrective drills.)
- (2) Thirty minutes of letter copying;
- (3) Five minutes for proof-reading;

- b. The letter copying work of the first three weeks should be based on a study of the indented style (see page 61, Figure 16). Assign pupils:

- (1) To the making of facsimile copies;
- (2) To arranging and copying matter in print but not letter form;
- (3) To arranging and copying matter in print but unarranged and unpunctuated;
- (4) To arranging and copying matter in print but unarranged, unpunctuated and in which certain words are underscored; (The underscored words are not to be copied, but while copying the letter the pupil is to substitute acceptable synonyms for the underscored words.)
- (5) To arranging and copying rough drafts;
- (6) To transcribing letters from printed shorthand;
- (7) To transcribing the pupil's own notes.

Before pupils transcribe either from printed shorthand or their own notes, the teacher should make sure that they can read the notes almost as rapidly as they read print and that they know how to

punctuate the letter, how to spell all the words and how to divide words at the end of the lines.

- c. After the pupil has gone through all these steps with the indented style of letter, he should spend the next:

- (1) three weeks on developing the blocked style through all seven steps;
- (2) three weeks on developing the block-indented style through all seven steps;
- (3) three weeks on developing the hanging indentation style through all seven steps;
- (4) three weeks on developing display letters through all seven steps;
- (5) three weeks on developing style and arrangement on common business forms.

- d. The envelope: If it should be impossible for the school to provide for practice purposes a sufficient supply of envelopes, a very good substitute may be provided in the following manner: Cut one inch from the end of a sheet of $8\frac{1}{2}$ by 14 paper. Cut what remains of the sheet into four pieces, each of which should be $4\frac{1}{2}$ by $6\frac{1}{2}$. Fold each of these smaller pieces in such a way as to reduce one surface to $3\frac{1}{2}$ x $6\frac{1}{2}$ inches. You will thus have a flap three-quarters of an inch deep attached to a sheet the size of an envelope.

The advantages of using this type of paper are: 1—You may teach pupils that the envelope goes into the machine with the flap down and toward the typist; 2—That the edge of an envelope which goes first into the machine is folded and must usually be sharply creased before it will feed into the machine.

- e. Illustration:

In the first three weeks of the second semester, teach pupils how to make "envelopes" in the manner described in the foregoing paragraph. Throughout the second, third and fourth semesters of typewriting, have pupils make these "envelopes" at frequent intervals and attach them, by hooking the flap over the letter sheet, with which they belong.

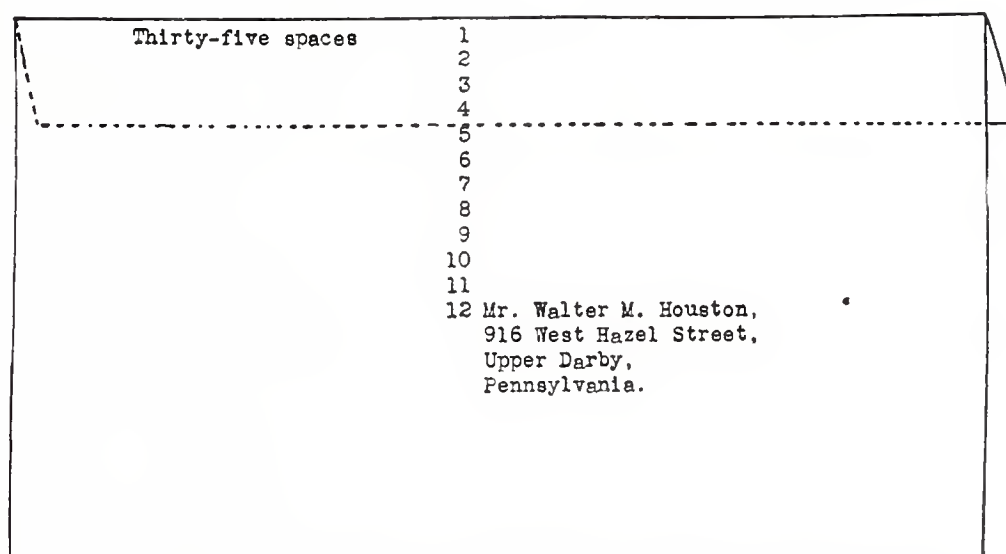


Figure 26—How to Space the Name and Address on Envelopes

TRANSCRIPTION

Correlation Between Advanced Typewriting and Shorthand

In advanced typewriting the correlation between typewriting and shorthand should be very close. If possible, the typewriting teacher in transcription classes should also teach the parallel shorthand class, because this is the point at which the pupil begins to transcribe from his own notes and for a time both the teacher and the pupil must watch the following points:

1. Before typewriting a letter which has been dictated,
 - a. Make sure of the correctness of each outline;
 - b. Have the letter read and reread until the notes can be read with the fluency of longhand;
 - c. Discuss points of style to be observed in typewriting the letter;
 - d. Discuss the spelling of all doubtful words;
 - e. Discuss the syllabic division of long and uncommon words;
 - f. Discuss any special punctuation which the letter may contain;
 - g. Time the transcription. If the pupil can read his notes fluently and does not hesitate over points in arrangement, spelling or punctuation, he or she should be able to transcribe at a rate approximately one-half to two-thirds of his copying speed.
2. Before removing the letter from the machine, the pupil should proof-read it.

The Typewriting Teacher's Objectives in Transcription

1. To teach pupils how to transcribe rapidly and accurately:
 - a. Drill upon transcription from printed shorthand. With regard to each letter or article which is transcribed, discuss before allowing pupils to typewrite:
 - (1) Arrangement and style desired;
 - (2) Spelling of the difficult words which occur in the letter;
 - (3) How the letter should be punctuated;

1. In diagram form the time allotment for each class period in the first six weeks of the semester devoted to teaching beginners transcription should be as follows:

SHORTHAND PERIOD Approximate Time Distribution				TYPEWRITING PERIOD Approximate Time Distribution		
	One-fifth	Three-fifths	One-fifth	One-fifth	Three-fifths	One-fifth
M	Note 1	Dictation practice	Note 2	Drill to teacher's count	Arranging and copying unpunctuated matter	Note 3
Tu	Note 1	Dictation practice				
W	Note 1	Dictation practice	Note 2		TRANSCRIPTION	Note 4
Th	Note 1	Dictation practice		Drill to teacher's count	Note 5 Note 6	Note 7
F	Note 1	Dictation practice			Arranging and copying unpunctuated matter	Note 3

- (4) Have the letter read several times in order to gain fluency in transcribing.
- b. Drill upon transcribing the pupil's own notes:
 - (1) Make sure of the correctness of outlines;
 - (2) Discuss style and arrangement.
 - (3) Have doubtful words spelled;
 - (4) Discuss the punctuation;
 - (5) Have the notes read over several times in order to gain speed in reading.

- c. Check the finished copy:
 - (1) Proof-read before removing from the machine.
 - (2) While proof-reading beware of common mistakes. The commonest mistakes are suggested by the word IDEAS as shown below:

I—Interrogation point omitted
 D—Division of word incorrect
 E—Enclosure omitted—Note
 A—Apostrophe omitted
 S—Spelling incorrect

2. To develop an artistic sense in the matter of the style and arrangement of the typed copy.
 - a. Discuss style in the arrangement of the typed copy. See Figures 16 to 24.

Making Lesson Plans

With the steps of achievement mentioned in the foregoing paragraphs in mind, the teacher may begin making lesson plans for the transcription class. In this process, he should first of all allocate his minor aims in his time allotment. Roughly speaking, the development of skill in typewriting and arranging unpunctuated and unarranged copy will take up much time in the first third of Typewriting III in schools where only four semesters are devoted to typewriting. Concomitant learnings during this period should be the parts of the letter, development of taste and skill in arranging letters, and a more thorough mastery of technique with speed and accuracy.

TESTS AND STANDARDS

2. A time allotment for a period in the second six weeks of the semester devoted to teaching beginners transcription should be as follows:

SHORTHAND PERIOD Approximate Time Distribution				TYPEWRITING PERIOD Approximate Time Distribution		
	One-fifth	Three-fifths	One-fifth	One-fifth	Three-fifths	One-fifth
M	Note 1	Dictation practice	Note 2		TRANSCRIPTION	Note 4
Tu	Note 1	Dictation practice		Drill to count	Copying letters from plate notes	Note 8
W	Note 1	Dictation practice	Note 2		TRANSCRIPTION	Note 4
Th	Note 1	Dictation practice		Drill to teacher's count	See Note 5 See Note 6	Note 7
F	Note 1	Dictation practice			Copying letters from plate notes	Note 8

3. A time allotment for a period in the third six weeks of a semester devoted to teaching beginners transcription should be as follows:

SHORTHAND PERIOD Approximate Time Distribution				TYPEWRITING PERIOD Approximate Time Distribution	
	One-fifth	Three-fifths	One-fifth	Four-fifths	One-fifth
M	Note 1	Dictation practice		TRANSCRIPTION	Note 4
Tu	Note 1	Dictation practice	Note 2		
W	Note 1	Dictation practice			
Th	Note 1	Dictation practice		See Note 5 Note 6	Note 7
F	Note 1	Dictation practice	Note 2	TRANSCRIPTION	Note 4

4. A time allotment for a period in the first and second report periods in the fourth semester would be like the chart in the foregoing paragraph 3.

Figure 27—Time Allotment for Lesson Planning in Transcription Classes

5. Notes referred to by number in the foregoing charts are:

- (1) In the self-reliance time, for the first six weeks pupils should study points in style and arrangement. In the second six weeks they should study rules of punctuation, spelling, and division of words. In the remaining twenty-four weeks they should practice writing phrases, sentences, and plate notes. Teaching material for this kind of drill during the first twelve weeks should consist of proof-reading and correcting letters. All pupils should have identical copies of matter to be corrected. Such matter, if not otherwise available, may be mimeo-

graphed. Phrases, sentences, and plate notes should be available in textbooks or may be mimeographed.

- (2) Dictation of matter to be transcribed and preparation of such matter for transcription.
- (3) Proof-reading the work which has been typed and arranged.
- (4) Proof-reading the transcription.
- (5) Practicing from straight copy for the purpose of developing speed.
- (6) A typewriting test, approximately ten minutes.
- (7) Proof-read the typed test.
- (8) Proof-reading work transcribed from plate notes.

TESTS AND STANDARDS

For an outline of the general theory of testing, refer to the State Course of Study for Shorthand, Section XVI, page 73. In this discussion, we learn that the first and most important aim of any kind of testing is educational—not to yield marks. Furthermore, if a test is to be truly educational, we learn: That the test should be in harmony with and rein-

force right curricular principles; that the true purposes of the subject should be furthered by the test; that a test should encourage, supplement, and reinforce proper methods of teaching; that tests may be used to highly motivate drill; that a good test is the best teaching which can be done at the time; that a good test provides a new view of the subject, a re-

organization, or a worthwhile application; and that to be truly educational, a test should not be too long. In other words, the plan for administering the test should leave time for the pupils to score it, after it has been completed, according to the teacher's directions. Only by conducting the test in this manner can the pupils discover their errors at once and learn promptly what should be the correct answer.

Tests for Typewriting One

1. Following the outline of the first twenty-five lessons, as detailed in the section on Lesson Topics, Aims and Plans, we should test for technique. Such tests take the form of:

- a. Parts tests. If the tests supplied by the manufacturers of typewriters are used, it will be necessary to secure a new supply every time the teacher desires to give a test. It has been found to be more satisfactory to supply pupils with a picture on which the parts of the machine are indicated by numbered arrows and to have the test written on a plain sheet of paper. In this way, the picture can be used for testing purposes almost indefinitely. A wall chart of parts with the names of the parts covered may be used to excellent advantage for this kind of testing.

Parts tests may be made to consume but a few minutes if the wall chart of parts or small pictures of the machine are used and the teacher writes on the board ten or more numbers of parts to be named. These brief tests may be introduced either as part of or substitutes for the self-reliance work. Parts tests may be procured from manufacturers of any standard make of typewriter.

- b. Key-finger location tests. A similar test for beginners is as follows: Make sure that the pupils understand the numbering of the fingers

from one to four beginning with the index finger and that R signifies right, while L signifies left. On any given day when this form of test is to be used the teacher should write on the board, not always in the order given below, a list of the fingers. The pupils should make a list of the fingers as given and fill in the "keys it controls" column. If this test is written with pen or pencil, it will be more exacting than to write it on the machine.

The test:

<i>Finger</i>	<i>Keys it controls</i>
R-2	ki8ik,k
L-3	sw2wsxs
R-4	;p0p;/; also @1/2-1/2@
L-1	fr4rfvf also gt5tgbg
R-3	lo9ol.l
L-4	aqaza
R-1	ju7ujmj also hy6yhnh
L-2	de3edcd

is on the same key with

2 is on the same key with —

5 is on the same key with —

7 is on the same key with —

¢ is on the same key with —

- c. Keyboard tests. In the keyboard test the pupil is supplied with a picture of the keyboard and a list of fingers is written on the board with the instruction to fill in on the keyboard in pencil the letters stroked by the stated fingers. Example:

Fingers

$$I_{-1}$$

R-3

L-4

R-2

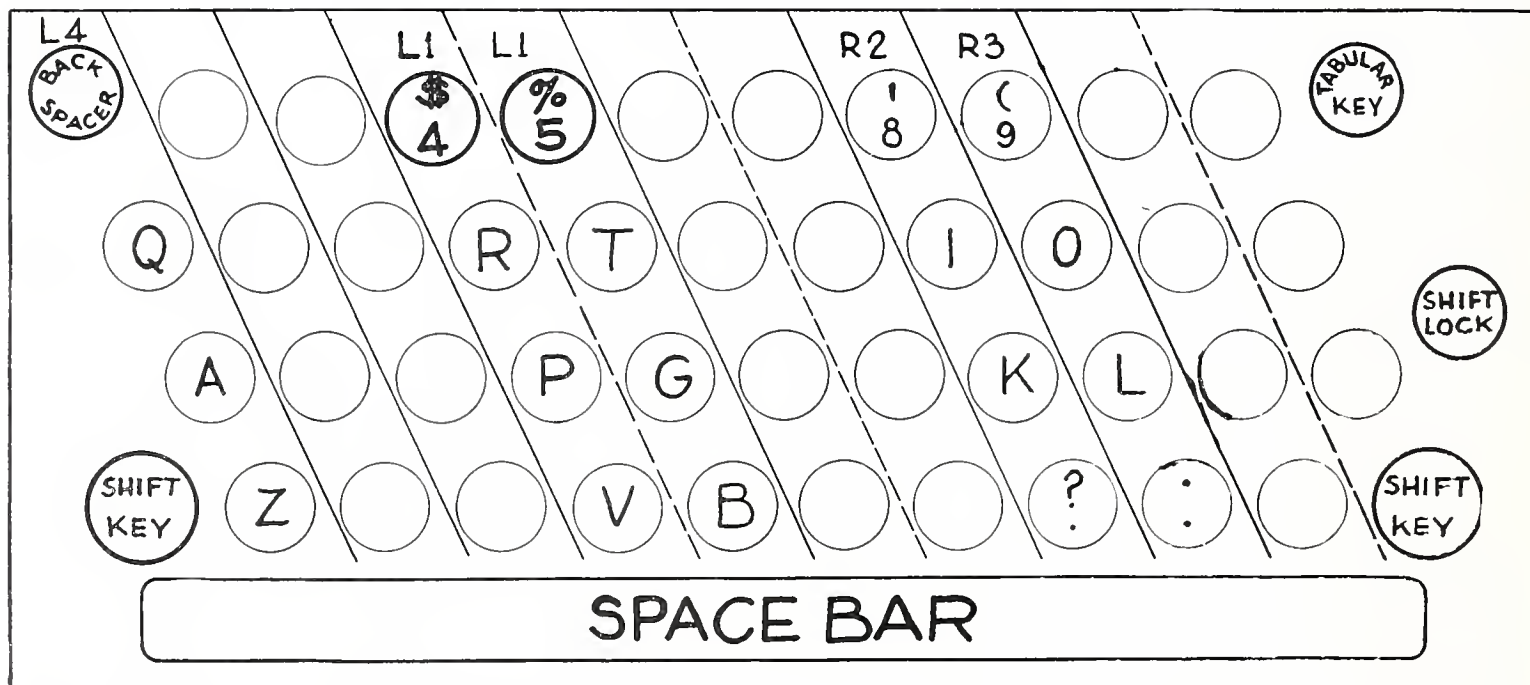


Figure 28—Illustration of Answer to the Keyboard Test

Instruct pupils to raise their hands as soon as they finish and when five have finished, the teacher should stop the test. This test may be given during, or as a substitute for, the self-reliance work.

- d. Carriage throw test. Instruct pupils to insert a piece of paper in the machine and to set the margin stop which controls the lefthand margin at ten points to the left of the center. Direct them to set a tabular stop at such a point that the carriage will stop ten spaces to the right of the center. Then when the teacher says, "Ready—start," pupils should write a common three-letter word at the beginning of the line, touch the tabular key; write a common three-letter word at the end of the line; throw the carriage back to the beginning of the line and repeat, line after line, until the signal "stop" is called. The number of throws is indicated by the number of lines thus written and becomes the score for the test.

As the pupil becomes more and more expert in this test, the length of the line should be increased and as an aid in teaching tabulation, the pupil may set two, three, or four tabular stops, and write a short common word at each stop.

The four types of tests which have just been described should be given occasionally not only in the first six weeks of the first semester, but throughout the first and second semesters.

- e. Standards: Since norms for these tests have not yet been definitely established, the teacher should keep in her test book a record of the results achieved, and use these results for comparison in future semesters. In noting the results, make a memorandum of the number of periods of instruction which the pupils have had prior to taking the test, the range of scores, and the median score. A bar graph on cross-section paper can be used to splendid advantage and the results of subsequent tests may be represented by parallel bars.
2. Lessons Twenty-Six to Forty-Eight, inclusive, have as their primary objective the development of accuracy. To meet that objective, the tests for this period should emphasize accuracy with technique, and we suggest:
 - a. True-false and multiple choice questions on correct posture, manipulation, division of words at the end of lines, and the proper use of special characters. Tests of this type may be found in *The Technique of Teaching Typewriting*, by Clem, and *The Stuart Objective Tests in Typewriting*, by Mrs. Esta Ross Stuart.
 - b. Accuracy tests. The teacher may begin using the accuracy test as soon as the keyboard has been developed. This type of test should be used frequently throughout the remainder of the first semester and all of the second semester. The test consists of typewriting for a

given time with the understanding that as soon as the pupil makes an error he will stop, leave a triple space, and start over again. In this type of test it is better to use single spacing. Copy for the test should be very simple in the first few weeks of typewriting instruction. We suggest the repeated writing of a rhythm sentence such as: It is the duty of a man to do me a turn and if he can he is to do so; the writing of the alphabet, either for ward or backward, or both; the writing of an alphabetical sentence, or the writing of one of the "Individual Work" exercises in the first twenty-five lessons. The greatest number of strokes written without error is the pupil's score.

Another form of the accuracy test, with the time element, is to give an ordinary timed copying test, discard papers with more than two errors. Some teachers motivate this form of test by making a large target. Those pupils who make no errors hit the bull's eye, with one error they are on the first ring of the target, and with two they are on the second ring. Small pasteboard arrows bearing the name of the pupil may be attached to the target in order to post the names of winners. One enterprising teacher has a large chart containing ten stars. In appearance it suggests a flaming bulletin board in the lobby of a motion picture theatre. The names of the pupils making the ten best scores are placed in the stars.

3. In Lessons Forty-Nine to Sixty-Eight the pupil's mind is directed toward accomplishment with speed. It is, consequently, during this period that we begin to use one-minute speed tests. The alignment, or reinsertion tests in *The Stuart Objective Tests in Typewriting* should also be used frequently during the eleventh, twelfth, thirteenth, and fourteenth weeks.
 - a. Standards: In regard to the matter of standards, Clem says that as soon as 80 per cent of the pupils can write a one-minute test at the grade speed standard or better and without error, the timed test should be extended to two minutes. When 60 per cent can write at the standard or better without error, the test should be extended to three minutes. For longer tests, extend the time after fifty per cent of the pupils can write at the standard without error.
4. During the last four weeks of the first semester and throughout the second semester, the pupil is endeavoring to master copy-getting and style and arrangement. For that reason, the pupil should continue to take speed copying tests, tests on centering, arranging, and typewriting letters, and tests on comprehension.

Tests on straight copy are no longer supplied to schools gratis by the typewriting companies. It is possible to make a contract with Mr. Kimball or with the School Departments of some of the other typewriting companies for a monthly

COURSE OF STUDY IN TYPEWRITING

supply of tests. The battery of five Blackstone tests is available through the World Publishing Company. Blackstone tests are standardized now and norms are available. It may be necessary for some teachers to make tests of their own. If they do, they should work out, before compiling a test, a very careful schedule of standards to be followed in making every test. Otherwise, the teachers will have no basis of comparison between the results achieved on one test and another. Such a schedule would be somewhat as follows:

- (a) The subject of the test material should be familiar, easily grasped, and the same on all tests. For example: A common business topic or letter.
- (b) The vocabulary of every test when analyzed should show about the same work content. For example: From 70 to 75 per cent of the words should be from the five hundred commonest words (Horn list), from 10 to 15 per cent should be from the next five hundred commonest words, and from three to five per cent should be from the second thousand commonest words.

- (c) The use of arabic figures and other special characters should be the same in all tests.
- (d) There should be the same number of capitals in all tests.
- (e) The strokes should be counted according to some standard, for example the Blackstone.
- (f) In the Blackstone tests, it is claimed that there are the same number of a's, b's, c's, d's, etc., in each test.

5. Two samples of tests on centering, arranging, and typewriting letters are as follows:

- (a) Letter test.

Directions: You are to speak to no one during this test. Follow the instructions as you understand them. Start writing your first letter when the teacher gives the signal. Continue to the end of the test as rapidly as you can work with absolute accuracy. Stop instantly when the signal is given. Figure the score exactly as you figure the fifteen-minute tests. Deduct ten words for each placement and typing error.

THE TEST

Indented Form, Closed Punctuation

	<i>Strokes</i>
February 2, 19__.	35
Mr. E. W. Dake,	69
Principal, Cleveland High School,	100
Waterloo, Michigan. Dear Sir:	132
We are planning to have an open	167
day in our shops on Wednesday, May	199
9. We are intending to invite	232
among others, the pupils of your	268
High Ninth Grade and their parents.	300
Before making definite arrangements,	337
I should like to know whether	371
this date will be satisfactory to	405
you. Sincerely yours, Principal.	
(61)	

Modified Block, Open Punctuation

	<i>Strokes</i>
September 21, 1928. Mrs. Alice	437
Dilworth, 249 Benvenue Avenue,	468
Berkeley, California. Dear Madam:	503
I am enclosing two releases for	535
your signature. I have succeeded	569
in compromising the claim of your	603
Insurance Company against Miss	634
Creed, arising out of an automobile	670
collision between her car and yours	706
at Glendale and Ashland Avenues,	740
Portland. I understand that you	773
had about twenty dollars damage	805
done to your machine and you will	839
receive your proportion of the	870
amount. I receive one-third of	902
the total amount as my fee. In	934
other words you will receive \$9.88.	970
Will you kindly sign these releases	1007
where I have marked a cross with my	1043
pencil and return these to me at	1076

LETTER TESTS

your earliest convenience. Very	1110
truly yours, Attorney. (120)	1143

<i>Indented Form, Open Punctuation</i>	<i>Strokes</i>
December 22, 1929. Department of	1177
Commerce, Gary High School, Gary,	1210
New York. Attention of Miss Minna	1245
Grant. I received the typing	1275
award which you so kindly sent me and	1313
I wish to thank you very much for the	1351
trouble you took to send it to me. I	1389
am very proud of it, for it represents	1428
my first work in typing under my first	1467
teacher. I shall always remember the	1506
teacher who trained me so well that I	1544
was able to fill a position after only	1583
half a course in typing. Respectfully	1622
yours, Secretary. (93)	1641

<i>Full Block, Closed Punctuation</i>	<i>Strokes</i>
March 1, 1927. Miss Grace Pohlman,	1676
1938 Harwood Street, Marion, Ohio	1710
Dear Miss Pohlman: We take pleasure	1746
in informing you that we have, for	1782
your convenience, opened a charge	1815
account in your name at our Denver	1849
store, and have listed you as a Pre-	1885
ferred Credit Customer with credit	1919
privileges at any of the Dressy Shop	1955
stores, on presentation of the card	1990
enclosed, properly signed by you.	2023
We hope very sincerely that you will	2059
find pleasure and satisfaction in	2092
having a charge account with DRESSY	2127
SHOP and we assure you it will be	2160
most gratifying to us to serve you.	2195
We are generally proud of our Denver	2231
store, and we are certain that you	2265
will find it pleasant to shop here,	2300
not only because of the store itself	2337
but also because of the character of	2373
DRESSY SHOP merchandise and DRESSY	2417
SHOP service, and the reasonableness	2453
of DRESSY SHOP prices. We are look-	2489
ing forward to seeing you, and we	2522
would like to have you feel that you	2558
will be most welcome at any time,	2591
whether you desire to purchase or	2624
not. Very respectfully yours, Man-	2659
ager. (196)	2671

(b) Letter test.

Copy the following letter. It should not require more than five minutes to type the complete letter accurately, which will indicate that your typing speed is approximately

fifty words per minute. Use your own judgment in setting it up attractively. Numerals in the righthand margin indicate total strokes. Divide by five to determine gross words.

COURSE OF STUDY IN TYPEWRITING

	<i>Strokes</i>
Mr. James W. Caldwell	26
President, The Caldwell Manufacturing Company	77
321 Broadway	91
New York, N. Y.	109
Dear Mr. Caldwell:	132
The enclosed credit card will establish your identity with us and will,	205
we hope, be of frequent service to you. This card establishes your	275
signature on restaurant checks which are to be charged to your account	346
and will serve to introduce you as a friend of the house to all of our	407
employees.	417
It will serve also as an introduction to other Arlington operated	435
houses and thus you will be at all times assured of every courtesy	552
Arlington operated houses have to extend.	595
Please sign your name in the space provided for your signature. This	667
will serve as a protection to you in the event you lose this card.	734
If you have not been the guest of one of our hotels recently, you will	806
be agreeably surprised upon your next visit. You will find that each	877
room has been equipped with a radio, servidor, ice water, and many other	951
features that will contribute to your comfort and enjoyment during	1018
your stay with us.	1037
Please remember that the door of this office is always open to you,	1106
and we are ready and anxious to render you any special service that	1174
we possibly can.	1191
Yours very truly,	1210
Business Manager	1229

(Total words—245.8—5 strokes per word basis.)

c. Two samples of the comprehension test are as follows:

- (1) The teacher dictates the following directions which the pupils carry out step by step.
 - (a) Center the test sheet in the machine.
 - (b) Set the marginal stops at 10 and 70 (on standard pica type machine).
 - (c) Space down 25 spaces from the top of the sheet.
 - (d) Begin at 10 and write your name.
 - (e) On the same line, write the date so it will end at 70.
 - (f) Space down three times and lock the shift key.
 - (g) Center "HIGH SCHOOL."
 - (h) Release the shift lock and space down four spaces.
 - (i) Set the marginal stops for a five-inch line.
 - (j) Begin at the left margin and write: "A smile may help you to make a score in this test."
 - (k) Space down three times.
 - (l) Begin at 28 on the scale and write each letter as I dictate it: "Capital May space the space b space st space school space win. (May the best school win.)"
 - (m) Go back and insert the letter e in the word "best."
 - (n) Space down twice.
 - (o) Begin at 28 on the scale and write this sentence: "Good work is appreciated."

- (p) Underscore the word "good" in the last sentence.
- (q) Space down three times.
- (r) Begin at 30 on the scale and write the sentence: "This is an easy test."
- (s) Take the test sheet from the machine and move the lateral paper guide to the left as far as possible.
- (t) Insert the test sheet and write the last sentence again. Place the second sentence exactly under the first.

Score: The teacher should carefully prepare a copy of the foregoing test on transparent paper and use the copy as a marking key. The sum of errors is the final score. (From the Stuart Objective Tests in Typewriting.)

- (2) Type the following sentences. Note carefully all underscored words. Correct errors in spelling and choose the correct words where a choice is given.

The change of prices will not *effect* *affect* the general public.

I *accepted* *excepted* the proposal.

These articles will be *useable* if they are properly *seperated*.

The outstanding *trate* in his character is *indiferance*.

Can *May* I go to too?

I have made a *through* *investegation* of the matter.

I *expect* *suppose* I must *accede* *excede* to your demands.

The *wether* is very *changable* *changeable*.

He is an *all-around all-round* good mechanic.

We were *altogether all together* last evening.

The *incidant* embarrassed me.

How many people had *access excess* to the safe?

The *consignment* of goods was *recieved* yesterday.

It seems *incredable* that such an *ingenuous ingenious* person could *rise raise* to such *hieghts*.

He is a most *consientious* worker.

The *attendents* *attendance* were well trained.

The entire office *personnell* was present.

The Allies were confronted with two serious *crisis* during the late conflict.

Type the following, inserting proper punctuation, paragraphs, and capitalizing the proper letters. (From "Applicant's Test for Dictaphone Training.")

6. Additional types of advanced tests are the centering test and the tabulating tests. For examples of the centering test see The Stuart Objective Tests in Typewriting, and for examples of the tabulating test see the national civil service commission's instructions to candidates for government positions. The tabulation test consists of two kinds: 1—in which the pupil makes a facsimile copy of a typewritten tabulation; 2—in which the information for a table is supplied and the candidate not only must type the tabulation, but arrange it as well.

An excellent "Test on the Parts of the Business Letter" has been compiled by D. D. Lessenberry and may be procured by writing to the School Department of the L. C. Smith and Corona Typewriters, Inc., Syracuse, N. Y.

A set of standardized tests for junior high school typewriting classes and one for senior high school typewriting classes has recently been published by the Public School Publishing Company, Bloomington, Illinois. The author of the tests is Jane E. Clem. The junior high school set contains two tests on straight copy, one on letter copying and arrangement, a completion test on parts and the manipulation of them, one on placement, and one on centering. The senior high school set contains two straight copy tests, one letter copying and arrangement, one multiple choice test on parts and manipulation, one tabulation test, and one test on copying rough draft.

7. Grading and scoring typewriting tests. The errors in tests on making straight copy, copy in accuracy tests, copying and arranging letters, and copying from rough draft are scored according to the International Contest Rules. Booklets containing these

rules may be procured from the home offices of the manufacturers of typewriting machines.

8. How to conduct proof-reading tests. The general practice in marking copying tests is to reserve enough time after the test is completed to have the pupil proof-read his paper. While the teacher reads from the printed copy, giving punctuation and any other special point which might be needed, pupils read their own papers and circle errors. Careful teachers have pupils exchange papers and proof-read them a second time. In either case, it is necessary for the teacher to go over the papers also. Where pupils are careless in proof-reading papers, they should first be warned, then penalized, then their papers should be discarded and a cipher given for the test.

9. The copying test score. In finding the score of a paper on which a copying test has been written, Blackstone has a device for finding the net score of strokes, but most teachers will still revert to the old habit of reducing the score to net words per minute. To complete this reduction, it is necessary to know the stroke intensity of the word; to divide the gross strokes by the stroke intensity. Thus finding the gross number of words typed; to deduct a penalty of ten words for each error; to divide the net number of words by the number of minutes during which the test was written, and after two divisions and a subtraction on each pupil's paper, the teacher has the net words per minute. How is she going to interpret net words per minute in terms of marks or grades?

10. Marks or grades in typewriting. For the assistance of teachers in interpreting scores of net words per minute in terms of grades, several devices are suggested, but none has received general adoption. A folder issued by the Gregg Publishing Company entitled "A Balanced Plan for Developing Fundamental Typewriting Skill" contains standards with weekly percentage grades for the first semester. A similar folder issued by the same company and entitled "Automatic Grading Chart for Fifteen-Minute Typing Tests" gives percentage grades by semesters for four semesters. Mr. V. A. Carmichael, of Ball State Teachers' College, Muncie, Indiana, in an address before the Typewriting Section of the Eastern Commercial Teachers' Association, in New York, March 25, 1932, submitted the following standards given in Fig. 29.

These standards are in terms of words per minute and were, apparently, established arbitrarily on the basis of the experience of one or more teachers.

COURSE OF STUDY IN TYPEWRITING

TYPEWRITING I

Grade	First 6 Weeks	Second 6 Weeks	Third 6 Weeks	Grade
A	NO-	30	45	A
B	SPEED	22	36	B
C	REQUIRE-	15	28	C
D	MENT	8	20	D

TYPEWRITING II

Grade	First 6 Weeks	Second 6 Weeks	Third 6 Weeks	Grade
A	50	55	60	A
B	41	46	50	B
C	32	36	40	C
D	23	27	30	D

TYPEWRITING III

Grade	First 6 Weeks	Second 6 Weeks	Third 6 Weeks	Grade
A	65	70	75	A
B	54	58	62	B
C	43	46	49	C
D	32	34	36	D

TYPEWRITING IV

Grade	First 6 Weeks	Second 6 Weeks	Third 6 Weeks	Grade
A	79	82	85	A
B	65	68	70	B
C	51	53	55	C
D	37	39	40	D

Figure 29—Ball State Teachers' College Typewriting Standards

An investigator working for this committee gave tests each six weeks during two semesters to second, third, and fourth semester pupils. Instead of reducing the scores to words per minute, he simply deducted fifty strokes (the equivalent of ten words if the stroke intensity is five) for each error and divided the net scores thus obtained into groups according to the curve of normal frequency. There were about thirty-five hundred scores in each of the three tests given to 11-B pupils, two thousand scores in each of the three

tests given to 12-B pupils. Every paper containing more than one error per minute was graded 0. As a result of this form of grading, we know what the best five per cent of pupils in each grouping did, what the next twenty per cent did, what the middle fifty per cent did, what the next twenty per cent did, and what the lowest five per cent did. In other words, the results are not what we think they should be; they are simply in terms of pupil achievement, and are as follows:

SECOND SEMESTER

	Excellent Highest 5 Per Cent	Good Next 20 Per Cent	Fair Middle 50 Per Cent	Poor Next 20 Per Cent	Very Poor Lowest 5 Per Cent
First Six Weeks	850 and over	849 to 625	624 to 350	349 to 125	124 to 0
Second Six Weeks . . .	950 and over	949 to 750	749 to 500	499 to 250	249 to 0
Third Six Weeks. . . .	1,050 and over	1,049 to 825	824 to 550	549 to 325	324 to 0

Figure 30—Results of the 11-B Test in Net Strokes for Five Minutes
(Divide by 25 to Obtain the Score in Net Words per Minute)

GRADING AND SCORING TYPEWRITING TESTS

THIRD SEMESTER

	Excellent	Good	Fair	Poor	Very Poor
First Six Weeks	2,000 and over	1,999 to 1,600	1,599 to 1,100	1,099 to 650	649 to 0
Second Six Weeks . . .	1,975 and over	1,974 to 1,675	1,674 to 1,200	1,199 to 725	724 to 0
Third Six Weeks	2,250 and over	2,249 to 1,875	1,874 to 1,200	1,374 to 800	799 to 0

Figure 31—Results of the 12-A Test in Net Strokes for Ten Minutes
(Divide by 50 to Obtain the Score in Net Words per Minute)

FOURTH SEMESTER

	Excellent	Good	Fair	Poor	Very Poor
First Six Weeks	3,425 and over	3,424 to 2,850	2,849 to 2,400	2,399 to 1,475	1,474 to 0
Second Six Weeks . . .	3,450 and over	3,449 to 2,875	2,874 to 2,175	2,174 to 1,625	1,624 to 0
Third Six Weeks	3,900 and over	3,899 to 3,275	3,274 to 2,450	2,449 to 1,925	1,924 to 0

Figure 32—Results of the 12-B Test in Net Strokes for Fifteen Minutes
(Divide by 75 to Obtain the Score in Net Words per Minute)

11. The advantage of the foregoing schedule lies in the fact that the teacher can determine from the net number of strokes written in so many minutes, the grade of the pupil. It is not necessary to divide twice and subtract once and the grades are determined, as all reliable norms should be, on pupil performance.
12. Administrative Use of Blackstone's Tests. Heads of departments should be interested in the following plan for keeping comparative records of progress in typewriting. Each typewriting section in a large school was given a form of the Blackstone test at the end of five, seven, ten, twelve, fifteen, seventeen, and twenty months of instruction.

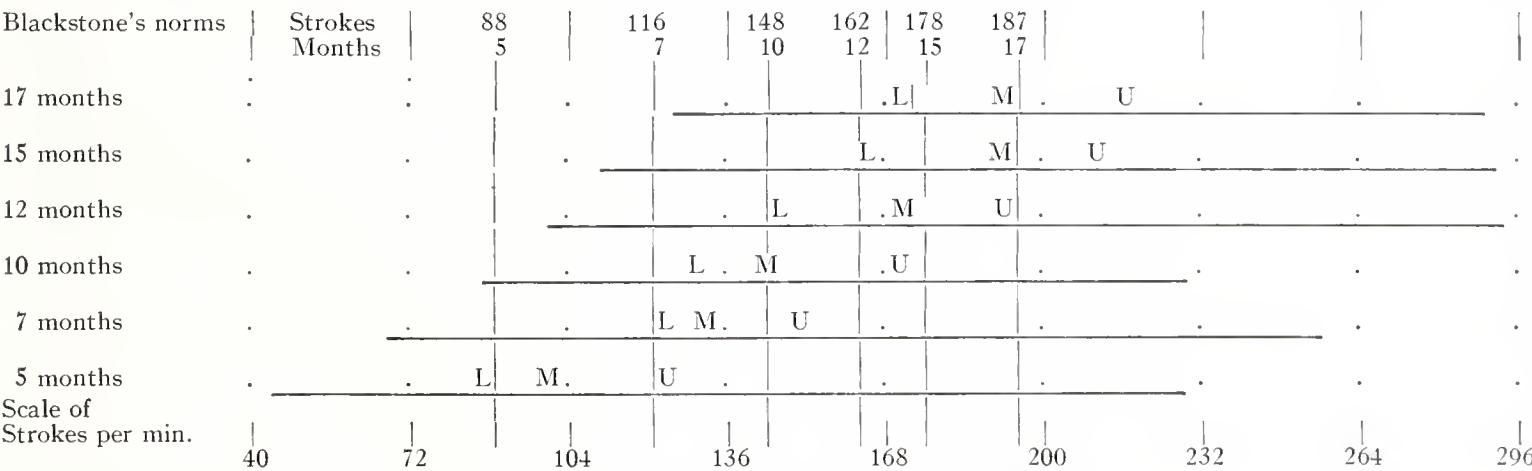


Figure 33—Record of One Class for Seventeen Months

Figure 33 shows the progress of one section through seventeen months of instruction.

Key: Solid vertical lines indicate the norms for the month;
L—Lower quartile; M—Median; U—Upper quartile.

Number taking the tests: five months, 188; seven months, 137; ten months, 126; twelve months, 126; fifteen months, 124; seventeen months, 95. The length of the horizontal line opposite the number of months indicates the range of the group which took the test.
The following diagram sets forth the comparative achievement of several sections which are each doing the same grade of work.

COURSE OF STUDY IN TYPEWRITING

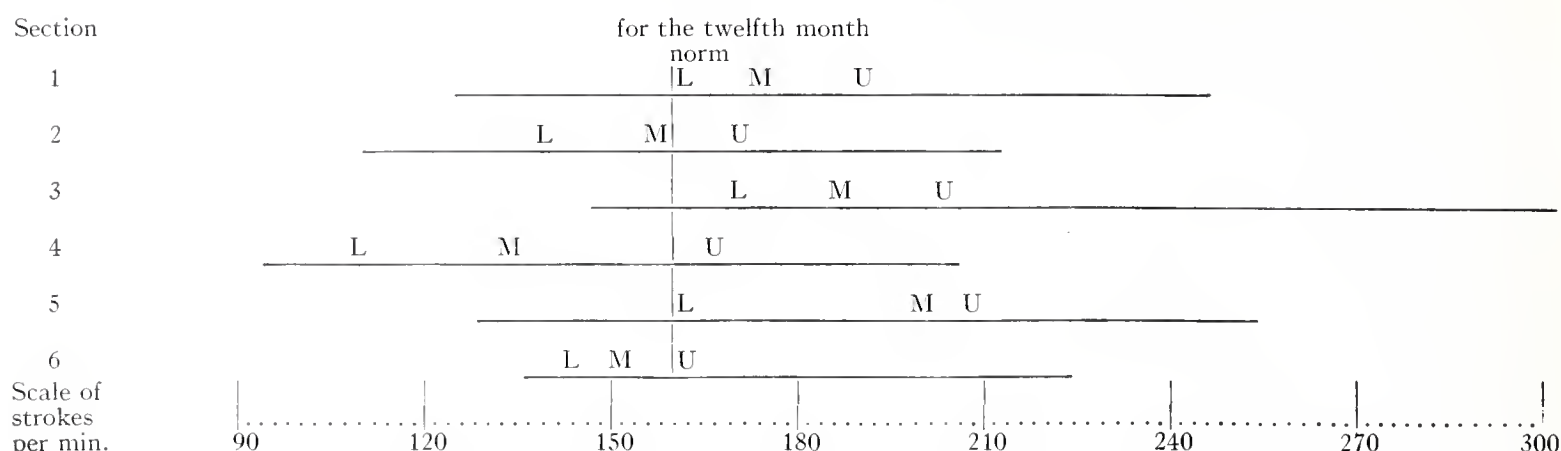


Figure 34—Comparative Performance of Classes in Typewriting III

FINGER GYMNASTICS¹

See the section on "Methods in the Typewriting Class" and Lesson Plans One to Twenty-Five.

"The object of muscular training of the hand is three-fold, viz.: the gaining (1) of strength, (2) of flexibility, and (3) of control. It is in the third of these that finger-board training is so defective; the reason being that perfect control can only be secured by an equal and thorough development of all the different sets of muscles (necessary in learning to typewrite). In the performance of the following exercises, two things should be constantly remembered: (1) All movements must be intelligently and thoughtfully performed; (2) The main object is the gaining of control over the various sets of muscles."

A few suggested exercises are:



FIG. 35

Independent Finger Action

With the hand in the position indicated in the illustration, tap with the index finger while keeping the thumb and other fingers touching the desk. Repeat the exercise several times with each finger; keep all other fingers touching the desk at all times; lift the finger with which you are tapping as high as you can and bring it down with as much force as possible.

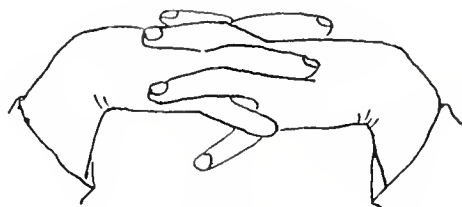


FIG. 36

Stretching and Resting Exercise

After each drill, interlock the fingers as shown in illustration 36 and with the fingers thus locked, extend the arms and turning the palms away from you,

stretch. Then join the tips of the thumb and each finger of one hand to the thumb and corresponding finger of the other hand and press the palms together several times in order to stretch the fingers backward. After which, drop the hands to your side in a relaxed manner and shake them.



FIG. 37

Finger Folding Exercise

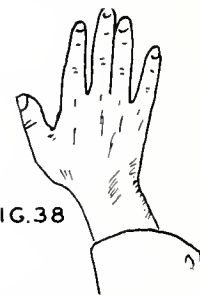


FIG. 38

Limbering Exercise

Hold the hand with fingers extended as in Illustration 37, and in turn fold down each finger as far toward the palm as possible. Also fold the thumb across the palm.

Extend the hand palm down on the desk as in Illustration 38, and with the thumb and first finger of the other hand raise in turn each finger and the thumb allowing it to snap down to the desk again.

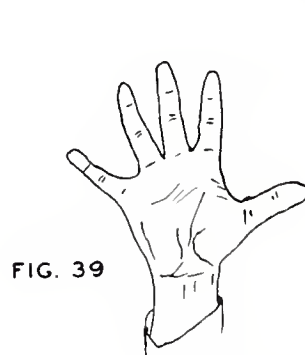


FIG. 39

Finger Stretching Exercises



FIG. 40

With the hand held in the position illustrated in Figure 39, alternately raise and lower each finger while keeping all fingers rigidly in position.

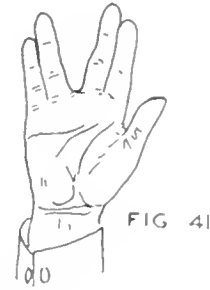
¹ From Hand Gymnastics, by Ridley Prentice, published by Novello and Company, Music publishers, London.

TYPEWRITING CONTESTS

Extend the fingers as shown in Illustration 40, and draw downward alternately each finger, at the same time holding all other fingers rigidly erect.

Hold the hand in the position illustrated in Figure 35, then straighten then return to position each finger in turn.

This exercise is called "the scissors." Hold first the second, third and fourth fingers together and open and close the space between the first finger and the second. Then hold the first and second fingers together, the third and fourth fingers together and open and close the space between the second and third, as in the illustration. Repeat the drill while holding the first, second and third fingers together and open and close the space between the third and fourth finger.



Scissors Exercise

Many similar gymnastic drills may be found in Clem and in the various elementary textbooks.

CONTESTS

The following resolution was one of many passed by the Department of Superintendence of the N. E. A., at its meeting in Washington in February, 1932.

"We view with disfavor the tendency toward the multiplication of district, sectional, state, and national contests. These contests now embrace every conceivable activity. Some of these contests are conducted by professional organizations with a high purpose, but many represent only thinly veiled commercial interests. Regardless of sponsorship, these state contests involve almost certain disorganization of schoolwork, the solicitation of funds for their financial

support, special preparation, and great nervous strain on the part of the contestants. Therefore, we feel that such district, state and national contests should be discouraged, and eventually, unless of proved social and educational benefit, abolished."

This committee feels that the most helpful kind of contest in which any typewriting pupil can engage is when the pupil competes with himself. That is, he keeps a record of his achievement, preferably in graph form, and constantly strives to improve upon his own record. Such a contest measures individual improvement and every pupil can enter it.

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